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house + home

NEWS

Eisenhower picks new HHFA boss: former Representative Albert Cole of Kansas (p. 140)

Frank Lloyd Wright

Personally conducted tour through a new house by the old master whose ideas are reflected in 1 million houses a year (below and p. 106)

Trade Secrets House sequel

Builders revise their plans and construction methods to keep up with its traffic-jam success with house buyers across the country (p. 114)

Builders' architect

Edward Fickett gives up custom-built practice to gross \$100,000 a year plus, designing for merchant builders (p. 132)

Advice to appraisers, part 3

A house is no better than its plan, and a good plan adds value to any house (p. 144)

Expansion attic truss

How to construct and erect the new design which combines clear-span economy with a big usable attic (p. 156)



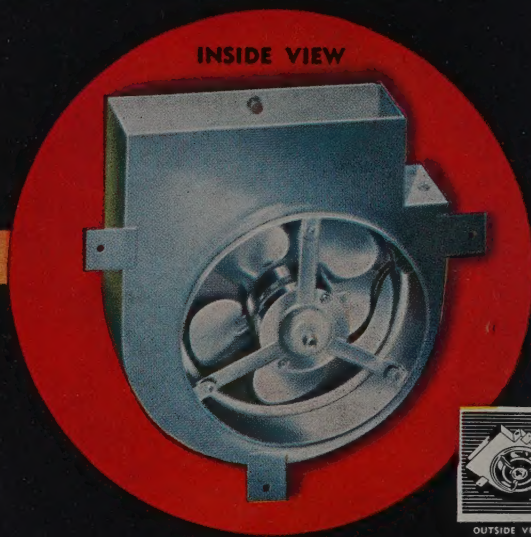
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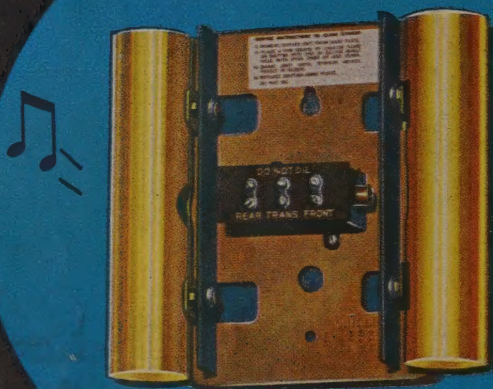
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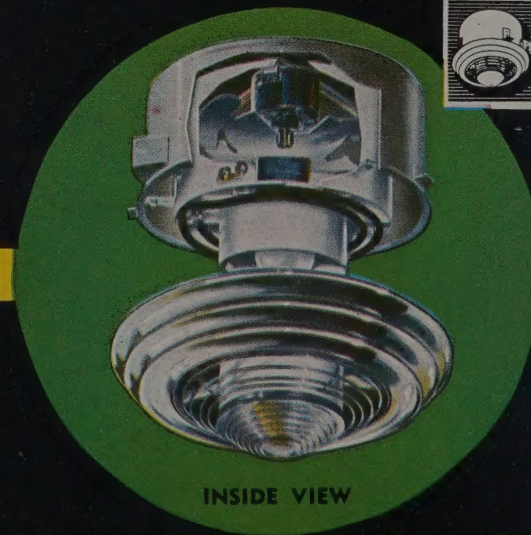
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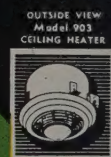
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37 News

60 Letters

80 Events to come

90 Behind the blueprints

100 Modern mortgages

105 EDITORIAL

Frank Lloyd Wright and 1,000,000 houses a year.

106 FRANK LLOYD WRIGHT HOUSE IN MICHIGAN

Built of special concrete blocks, this long, shiplike house at Kalamazoo is closely integrated to its hilltop site.

114 TRADE SECRETS HOUSES

A report on the houses being built across the country, their effect on builders and their reception by the public.

124 HOUSE WITH THE PORCH IN THE MIDDLE

Architects Bassetti & Morse open up a small house at Lake Stevens, Wash. with a central living terrace.

128 HOUSE RINGED WITH POCKET GARDENS

Los Angeles house by Kazumi Adachi offers a practical plan adaptable to a suburban lot, gives privacy with views of patio gardens.

132 THE FICKETT FORMULA

Architect Edward Fickett of Los Angeles works only for merchant builders, grosses \$100,000 a year designing speculative houses, apartments and stores.

140 NEWS

Eisenhower picks new HHFA boss: former Representative Albert Cole of Kansas.

142 LOOK WHAT'S SELLING IN TOPEKA!

For Topeka Builder John Sargent Jr., Architect James C. Cushing develops three- and four-bedroom contemporary houses which, at \$11,375 and \$12,675, outsell all local competition.

144 ADVICE TO APPRAISERS

Third in a series on design for builders, a study of typical builder-house plans and how they could be improved.

150 NEW HAMPSHIRE VACATION HOUSE

Architect Dan Kiley's rugged two-story house at Franconia has a plan which opens for entertaining, is built of local stone and solid wood with walls 8" thick.

156 EXPANSION-ATTIC TRUSS

How to erect and build the new truss developed by the University of Illinois Small Homes Council to combine the advantages of clear-span structure and expansion-attic cubage.

162 ADHESIVES PAVE WAY FOR MORE TILE ECONOMY

Thin-set adhesives and thin tile are breaking prices of installed tile, making it economically feasible for builder houses.

164 NEW PRODUCTS

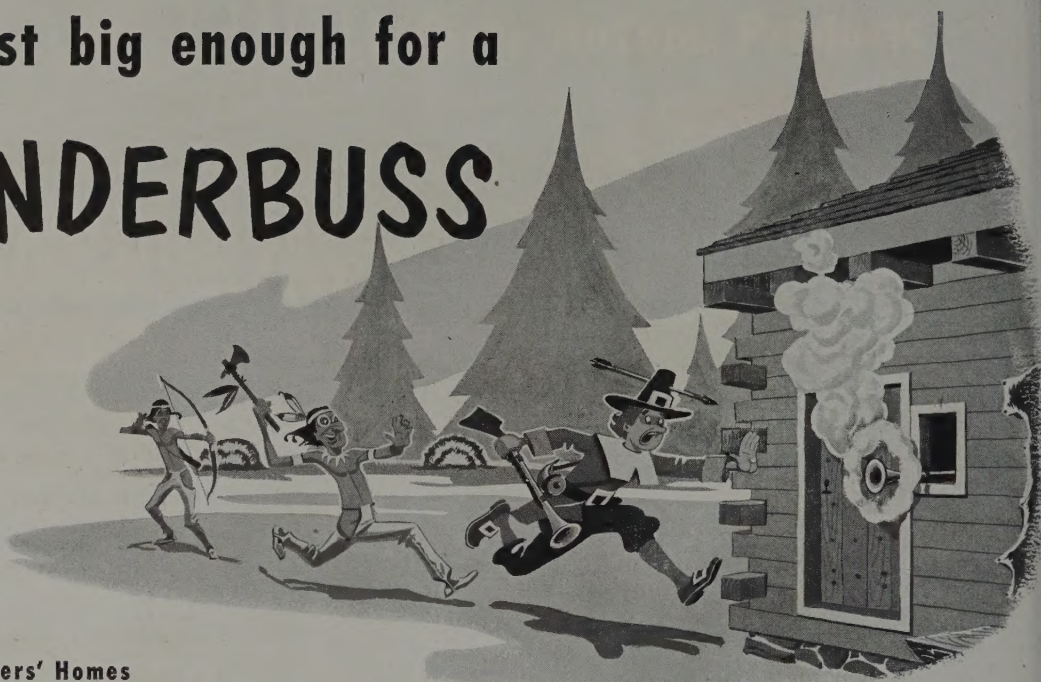
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176 Reviews

216 Technical publications



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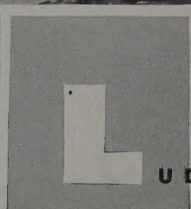
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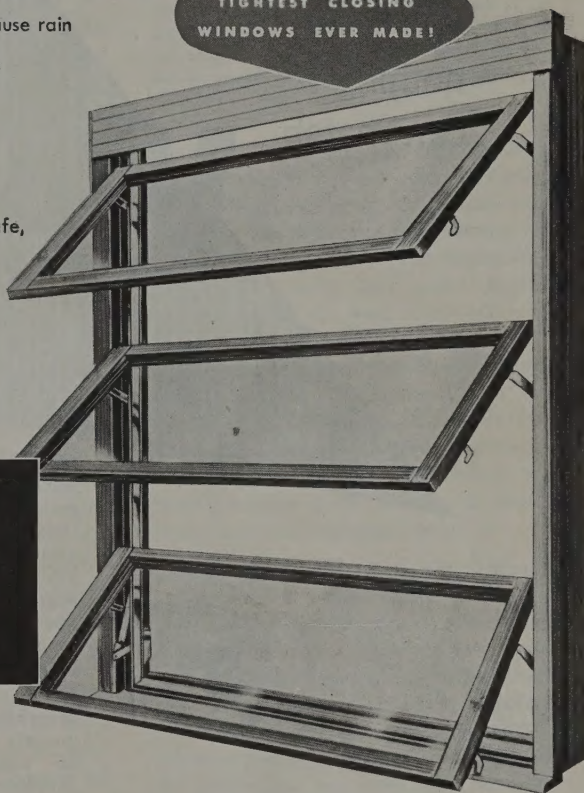
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No overhaul of housing policy due until '54; Taft raps HHFA

Many a building man hoped the Eisenhower administration would act quickly to revamp US housing policies, perhaps bottle up public housing and begin reducing omnipresent federal influence over private homebuilding. This month, the industry began to realize that only minor changes were likely this year.

The evidence mounted steadily. In his state-of-the-union message, the President proposed creation of a commission to study health and welfare needs, presumably including housing. The study would not be completed for 9 to 12 months. Moreover, the chief executive omitted housing from his 11-point legislative program. While White House economists were busy collecting data on housing, there was no full-time adviser on the Eisenhower staff who was really familiar with the subject. The appointment of Albert M. Cole as HHFA administrator (p. 140) put a Republican head on the government's vast body of housing agencies, but Cole would go into office with Presidential orders to study housing thoroughly, with an open mind, before re-shuffling his organization.

Ikemen were getting plenty of advice from almost every corner of the building industry and many a corner out of it. The most newsworthy counsel came from Senate Majority Leader Robert Taft who told reporters: "I suggested to the President that he approve someone (for HHFA administrator) with the understanding he would have six months to study the situation and recommend what should be done with housing agency. I don't think we need a housing administrator at all."

Guidepost in agriculture? Some clues to the administration's philosophical approach to government-in-housing might be found in its forthright determination to reverse New Deal policies in agriculture. Agriculture and construction, the nation's two biggest industries, have two things in common: 1) management control is widely dispersed, which makes them slow to respond to market and technological change, and 2) the federal government has machinery for complete control, has become the dominant market influence.

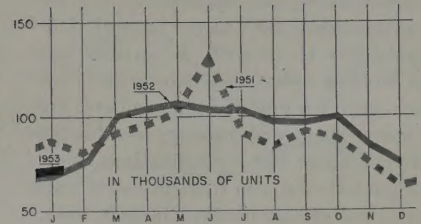
In Agriculture Sec'y Benson's mind was a hope that the farm community could find some way to stabilize its own prices without government aid. Recently, he recalled that the butter industry once set up an industry-operated company which bought and sold butter to stabilize the market. It worked moderately well. Benson indicated he thought the answer to getting the government out of the farm

price stabilizing business might lie in that direction.

Among building industry groups, the most specific housing program was being advocated by NAHB. Refining broad policies adopted at January's annual convention, the homebuilders last month recommended a new formula for FHA loans to end the inequity of a down payment on a \$12,000 house being four times that for an \$8,000 house. The plan: a 95% maximum mortgage for an \$8,000 valuation (\$400 down payment); a 90% maximum mortgage on \$12,000 (down payment \$1,200); an 88% ceiling on \$15,000 (down payment \$1,800); and an 80% maximum on \$20,000 (down payment \$4,000) which would involve raising the present FHA mortgage ceiling from \$16,000 to \$20,000.

President Brown Whatley of the Mortgage Bankers Association demanded a complete reorganization of FHA to free it "from all welfare and pump-priming activities."

Debenture rate boost. FHA Commissioner Walter Greene was much inclined to support suggestions for considerable overhaul of his own agency. Back in December, FHA's Greene revealed this month, he urged the Treasury to assent to an increase from 2½ to 2¾% in the interest rate on FHA 10-or-more-years debentures issued on foreclosed property. Greene favored raising the mortgage ceiling above \$16,000, raising the amount of mortgages eligible for 90% loans. Most important, he admitted that the mortgage limit on multifamily rental housing (Sec. 207) was too low at \$8,100 to let builders put up anything but garden apartments. This could be the most crucial item of all to produce private



Source: Bureau of Labor Statistics

HOUSING STARTS dropped to 71,000 in January, 7% below December. The decline, almost all in private housing, occurred in northern sections of the country. But January 1953 starts were 9% above January 1952, and BLS officials were still betting on a million-house year.

building where it is needed most. As BLS Commissioner Ewan Clague warned, during the building boom of the 20's rental units accounted for 40% of housing volume, hit a peak of 44% in 1927. Since World War II, rental housing had never topped 22½%, even at the peak of the 608 program. Now, it was down to 17% over all, and down to 12% of private housing starts. Warned Clague: "Even allowing for the trend toward home ownership . . . there is a growing shortage of rental housing. Filling this need could well sustain the housing market if the volume of single-family homebuilding should drop."

Lumbermen speak out. The National Retail Lumber Dealers joined the chorus of demand that FHA raise its mortgage ceiling to \$20,000, shrink its down payments on larger homes in line with inflated costs. The National Lumber Manufacturers' Association, however, proposed that private interests guarantee home loans so the government can eventually liquidate FHA. NLMA also attacked government research in housing (for which HHFA is spending \$950,000 this fiscal year).

On one point, almost all the experts agreed: new housing starts must be kept close to a million a year. If they fall far below that level, it would be hard for the industry to keep up its drive against slums.

Code reform group voted \$20,000 by US chamber

In the decades-old struggle to untangle the nation's jungle of building codes, the most promising weapon is the little-known Joint Committee on Building Codes. Since it was founded in February, 1949, the committee has managed, in only 14 meetings, to blend from regional building codes already in widest use a sizable chunk of what it hopes may someday become a unified national standard for construction. Written so far are sections on definitions, types of construction, design loads, use and occupancy

Albert M. Cole, a Kansas lawyer and public housing opponent who was defeated for re-election to Congress last fall, is nominated as HHFA administrator.

(pp. 140-141)

classifications, and requirements for steel construction. But there is still much ground to be covered. It includes some of building codes' most controversial items: fire resistance ratings, height and area limitations, wood and masonry construction. And although the committee is composed of top technical men from the nation's nine principal groups involved in code work,* speedier progress is hampered by the fact that its representatives from building officials' organizations are shy of funds to attend meetings.

Last month, the US Chamber of Commerce stepped into the breach. Its construction industry advisory council voted the joint committee \$10,000 a year for two years, principally to cover the travel expenses of two representatives of each major building officials' group to committee meetings. Explained Manager F. Stuart Fitzpatrick of the chamber's construction department: "Our interest is to see that the joint committee does not collapse because of building officials' travel expenses." Said Technical Director R. G. Kimbell of the National Lumber Manufacturers' Assn.: "The work of the joint committee offers one of the most practical and sanest approaches to code unification devised. The committee has no dictatorial powers. It is persuasive only." The chamber also extended its financial offer to the Southern Building Code Congress, which so far has refused to play on the team with the rest of the nation's code experts.

Policy platform. The construction industry advisory council also reinforced its claim to being one of the impressively co-

* American Standards Association, Building Officials Conference of America, National Board of Fire Underwriters, National Fire Protection Association, Pacific Coast Building Officials Conference, Underwriters Laboratories, National Bureau of Standards, HHFA and the Department of Commerce's construction division.

hesive forces in a factionalized industry. Adopting an 11-point plan for sustaining construction activity, it urged:

► Flexible interest rates for FHA and VA mortgages; no federal regulation of consumer credit in housing.

► A restudy of the defense housing program to reduce its cost and weed out areas where it is no longer needed.

► Redrafting of the "burdensome federal tax structure" with more flexibility for depreciation so as to encourage new commercial and industrial building. (Rep. Daniel A. Reed [R, N.Y.], chairman of the House Ways & Means Committee, told the meeting he hoped to rewrite the federal tax code completely by January 1954.)

► Improvement of federal statistics on housing starts and dollar outlays for construction "to guide the more intensive efforts which must be undertaken from now on to sustain . . . activity."

Statistics deplored. On construction statistics, the advisory council adopted a bluntly critical report by Economist Walter E. Hoadley Jr.: while construction has swelled to a \$40-billion-a-year industry—one tenth of the total national product—"at no time has the government's statistical information about construction been of high dependability and today the quality of figures is poorer than at any time" since World War II.

Hoadley blamed not BLS and the Commerce Dept., which gather the facts, but Congress and businessmen who do not understand how much havoc can be wrought by bad information. Last year, Congress sliced BLS budget for housing starts from \$625,000 to \$300,000. Hoadley named no figure, but BLS officials think restoring that slash would let them produce an accurate starts count. As it is now, BLS is using an out-of-date yardstick to correct lag and lapse in building permits, and bases its entire sample of housing construction on conditions prevailing in 1940.

Walter Bennett



CHAMBER OF COMMERCE meeting heard President Richard J. Gray of AFL's Building Trades Dept. (3d from r) declare: "99% of the strikes in construction are directly attributable to lack of understanding between labor and management." Gray pleaded for industry support for the AFL's proposals for Taft-Hartley Act revision. Pictured

at luncheon (l to r): Contractor William Muirhead, AFL President George Meany, Chamber President Laurance Lee, Gray, Sec'y.-Treas. Joseph Keenan of AFL's Building Trades Dept., Lumberman Norman P. Mason, chairman of chamber's construction and civic development committee.

Public housing Red oath gets spotty enforcement

Enforcement of the Gwinn amendment requiring loyalty oaths from public housing tenants was taking on a crazy quilt pattern. Seven months after the law went into effect, something under 100 subversive suspects had been ordered evicted, but not a single eviction had been carried out. The chief result was a bumper crop of lawsuits. The most important one, an appeal approved by Supreme Court Justice Robert H. Jackson, barred the New York Housing Authority from enforcing the oath until the Supreme Court reviews the constitutionality of the amendment (an order not binding elsewhere). Some patchwork enforcement revealed by a HOUSE & HOME survey of 12 metropolitan areas:

► Houston: "Nobody here has done anything about the Gwinn amendment."

► Dallas: Enforcement was delayed to await a court decision elsewhere. But these were taking so long the Housing Authority will start enforcement this month anyway, evict any noncomplying tenant "immediately."

► Bridgeport: All tenants so far were signing affidavits, but Housing Authority Director Harold C. Poole said even if any refused he would put off evictions until some court approved.

► In Atlanta, Pittsburgh, Cincinnati, Boston, Miami, Denver, Oakland and Contra Costa County, Calif. all tenants were signing affidavits. Tenants of existing San Francisco housing were not being asked to take the oath, but those for a new project to be opened in April would be.

In Los Angeles 36 out of 5,000 tenants refused to sign, but no evictions were scheduled pending a definitive court decision somewhere. In Richmond, Calif. four refused to sign, in Newark, N. J. 11, in New York City at least six (in all instances only a small fraction of 1% of public housing dwellers).

Technically, the law applies only to projects with federal contracts adopted or amended since last July, but PHA has urged local housing authorities to apply it on their own to all projects.

Houston judge calls public housing 'no place for child'

When Judge Roy F. Campbell ruled in a child custody battle that San Felipe Courts, a Houston public housing project, is "no place to rear a child," public housers demanded a retraction. Snapped Col. E. A. Eversberg, director of the Houston Housing Authority: "If he refuses . . . I promise you'll see some fur fly."

The fur that flew, however, was when the

judge wrote Eversberg defending his threat to put the baby up for adoption if she were returned to San Felipe. Charged the judge: police files showed an average of 302 cases a year at San Felipe for the past ten years including "murder, rape of little children, sodomy, aggravated assault, burglary, theft of autos, drunkenness, sex crimes, child delinquency, prostitution, . . . narcotics."

He cited some samples: on July 5, 1952, a 14-year-old girl was arrested for prostituting on the Houston streets "and her delinquency started . . . in San Felipe Courts." On May

6, 1952, a 15-year-old girl living in San Felipe "was arrested for associating with prostitutes. . . . During 1951 and 1952 at least four people in San Felipe Courts were arrested for possession and sale of marijuana. Two are now in the penitentiary. . . . On Dec. 2, 1950, several girls were ordered to the reformatory for having sex parties on the lawn. . . . On June 8, 1951, a 10-year-old boy who had been chained to his bed with a cow chain for three days was released by police. . . ."

Eversberg's reaction: silence.

Ikemen begin killing controls; official inertia confounds effort to reduce federal building

It was the biggest month of change for building since the Korean war. In its first weeks in office, the Eisenhower administration acted decisively to apply Republican ideas to the nation's basic economy.

► The Treasury, refunding \$8.8 billion of the national debt, moved to let interest rates slide upward by exchanging 17/8% treasury certificates for \$619 million of medium-term bonds at 2 1/2% and \$8.1 billion one-year certificates at 2 1/4%. Incoming HHFA Administrator Cole hinted a decision should be forthcoming within a month whether VA and FHA mortgage interest rates should follow the trend.

► Prices, wages and production were freed from controls that industry had cried so long were unnecessary (see below).

► Budget Director Joseph Dodge jarred the vast federal bureaucracy from top to bottom with a major economy drive. It included orders to review and reduce federal construction, clamped a semifreeze on hiring. In housing, lame-duck administrators gave no sign they were carrying it out. HHFA said redevelopment grants were continuing as usual. The Public Housing Administration insisted its program for the current fiscal year was untouchable since the 35,000 units permitted by Congress were already committed.

Charting the future, President Eisenhower recommended that rent control be allowed to die April 30 except in "so-called defense areas" (see col. 3). There seemed little doubt that Congress would agree, although the President's remarks were so vague there was confusion over which kind of defense areas he meant (there are three).

Yet none of the actions seemed likely to do much to push the US economy off what White House economists call its present "knife-edge." Eisenhower set the course in his state-of-the-union address: "It is axiomatic that our economy is a highly complex

and sensitive mechanism. Hasty and ill-considered action of any kind could seriously upset the subtle equation. . . . Action must be gradual."

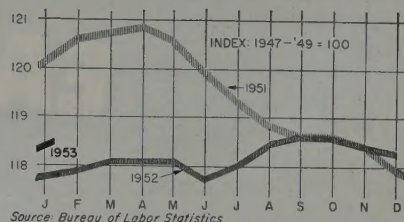
CMP open-ended; wage, most price controls die

Said Dwight Eisenhower in his guidepost state-of-the-union message: "The weight of evidence is clearly against use of controls in their present forms. . . . Accordingly, I do not intend to ask for a renewal of . . . wage and price controls on April 30. . . . Meantime, steps will be taken to eliminate controls in an orderly manner. . . . Material and product controls should be ended except with respect to defense priorities and scarce and critical items essential for our defense."

The orderly elimination sped into being so fast it left bureaucrats gasping. Cried one officeholder: "I don't know where we're going, but we're damn sure on our way."

Prices—Ceiling prices were abolished on all but a handful of market basket items, and most major industrial materials except steel and nickel. Specifically decontrolled were: most building materials, property management, construction services and prefabs. Decontrolled copper reacted chaotically, with price hikes ranging from 3¢ a lb. (to 27 1/2¢) all the way to 12¢ a lb. (the 36 1/2¢ level of foreign copper). The price of steel scrap hardly moved at all. First reports from building material dealers indicated few price changes were in prospect. Cement prices, unchanged since 1950 except for advances to offset rising freight rates, might climb 10¢ a bbl., trade spokesmen predicted. Lumber was already below ceiling prices. The Dow Service found a 5% drop in building costs during the last six months in New England.

Wages—Salary and wage controls were



MATERIALS PRICES rose from an index of 118.3 in December to 118.4 in January. Responsible were price increases (all under 1%) in lumber, cement, paint and some concrete products. The effect of price decontrol would not show for at least another month.

abolished entirely. With most construction labor contracts coming up for renewal in the spring, this could have a big effect on building costs. AFL President George Meany, a former building trades man, was already on record that restudy of contracts was in order. Portland, Ore. AFL cement masons promptly negotiated a 17¢ wage boost (to \$2.60). The 50,000 CIO woodworkers in the Northwest demanded a 30¢ an hour increase on top of a six-hour day. With a plywood surplus facing operators, an April 1 strike looked likely.

Materials—The Defense Production Administration was abolished—so fast that several top DPA men from the old administration had no advance warning. Dismantling of the Controlled Materials Plan began as Acting ODM Director Arthur Flemming ordered CMP open-ended at once. That meant anyone willing to gamble on getting on a mill schedule could proceed with any kind of construction without federal permission.

The administration had not yet made up its mind what kind of new production controls law to seek from Congress. Sen. Homer Capehart scheduled hearings on his bill to give the President standby CMP powers—a measure Rep. Jesse Wolcott, chairman of the House banking committee branded as "a sword of Damocles" over business. It was a tossup whether the House would pass it.

GOP maps strategy to end rent control April 30

Republicans prepared to let federal rent controls expire April 30 except in critical defense areas, as the President had asked.

Chairman Jesse P. Wolcott (R, Mich.), who scheduled a House banking and currency committee hearing on the subject early this month, explained it probably could be shown that roughly 80% of the units under federal control are concentrated in only three states, Mass., N. J. and Penn. Said Wolcott: "I don't think there is any

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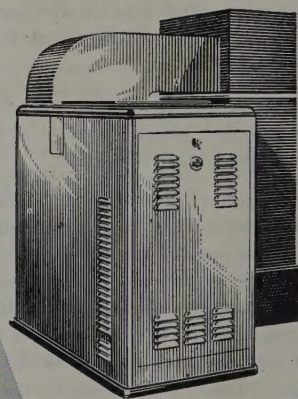
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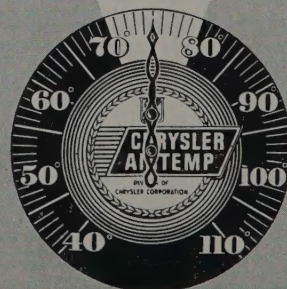
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justification whatsoever for the United States maintaining an expensive bureau. States should take over this responsibility, or delegate authority to the cities that want controls."

Congressional probe will sift US housing policy

Congressional housing and building probes took on a new complexion under the new administration. Democratic committees used to dwell on building industry shortcomings. GOP committees started nosing into misdeeds and deficiencies in government housing agencies.

The most important inquiry of the session was likely from two subcommittees of the House committee on expenditures in the executive departments now headed by superferret Rep. Clare E. Hoffman (R, Mich.). One will scrutinize housing organization, including whether HHFA is still needed (Sen. Taft now favors disbanding it, p. 37). The other will explore how efficiently and honestly FHA and other federal agencies both in and out of housing have performed.

Alaskan scandal. Subcommittee members were still to be named, but Hoffman ran a warmup hearing Feb. 16 that turned a scorching beam on FHA in Alaska.

The committee and its red-haired counsel, William F. McKenna, questioned FHA Zone Director M. Joseph Cassidy on the saga of former FHA Alaska Director Clinton C. Staples, who resigned but is still under Dept. of Justice investigation.

A forgetful and evasive witness, Cassidy testified that Staples visited the United States from Nov. 27, 1950 to Feb. 1951 "to conduct business with sponsors and contractors." During this trip, Cassidy stated, Staples underwent a gallstone operation for which a firm building FHA-insured housing at Anchorage paid. In California for a month on subsequent sick leave, Staples received not only his salary but a \$9 per diem allowance which Cassidy admitted (when confronted with the records) that he had approved.

Plush German housing. Another of Hoffman's subcommittees, headed by Rep. William E. Miller (R, N. Y.), held a hearing the next day that spotlighted the contrast between overseas housing available to servicemen (p. 47) and diplomatic toilers.

One 16-family building for State Department employees in Bremen cost \$40,736 a unit, the committee heard. Another planned, but now held up, would cost \$25,481 a unit, contain 11 maids' rooms for 12 apartments that would house 21 department bachelors having salaries of \$3,000 to \$9,000 annually.

VA, FHA loans grow scarcer as GOP hesitates at raising interest rates

After six weeks in office, the Republican administration was still fumbling with homebuilding's most urgent problem.

It had issued new government bonds at higher interest rates, cut stock market margin requirements from 75 to 50%. It had abolished wage controls and scrapped price controls on all but scarcest items.

But it still had not mustered resolve to end price fixing of government mortgage credit. The drive to unfreeze VA and FHA rates had suffered a setback at the hands of bumbling Sen. Homer Capehart (R, Ind.) when he summoned lame-duck VA and HHFA chiefs to testify before his banking committee on the problem. Although VA appraisal requests for December were 19% below December, 1951, VA Boss Carl Gray insisted 4% was still plenty to bring out mortgage money. HHFA Administrator Foley disagreed. But the hearings thwarted any immediate chance for Congressional pressure to boost the rate.

Freewheeling conventionals. This month, HOUSE & HOME correspondents across the nation reported the result: compared with readily available conventional funds (as low as 4½% in some areas) VA and FHA money was growing scarcer in most places where it was not already nonexistent. In Utah, for instance, builders said VA loans were being discounted 5%, FHAs 2½%. Some lenders admitted "holding back" for higher FHA-VA rates they feel the government cannot postpone much longer. But more often they blamed FHA-VA scarcity on the greater attraction of the conventional market and the fact that interest on other investments has risen.

► Said former MBA President Aksel Nielsen, friend and confidante of President Eisenhower: "When you see a Consolidated Edison bond issue going at 3.57% it makes a 4% mortgage look pretty silly. And tax-exempt bonds available to yield 2.68% are the equivalent of 5% taxable securities."

► Said the mortgage vice president of one of the 10 largest insurance companies: "We take in \$3 million a week and it simply must go out. We can't hold off. However, we are buying no VA's and less and less FHA's. The reason is simple: Yields on new industrial and utility bonds are better than they have ever been. Some public utility issues are almost better than FHA's!"

► Typical real estate officers' comment in San Francisco banks: "We don't even discuss VA loans with builders, and we aren't likely to unless the rate moves up con-

siderably." About half of the city's banks and most insurance firms had withdrawn from the FHA market over the past year. Said one builder: "To get an FHA through now we have to agree to sign for an equal amount in conventional loans."

Talk without action. There were two unproductive Washington conferences. An American Legion committee meeting with government and mortgage industry leaders ended with Legion representatives inclined to think any VA rate changes should be based on Congressional action. The reason: Congress had fixed the rate on direct VA loans at 4%. VA officials had no power to raise it to conform if their regular loan rate went up. If the Legion itself intended to recommend a higher VA rate it would have to wait until approval by its national executive committee at its April meeting.

With the long-delayed nomination of a new HHFA Administrator out of the way the last normal excuse for continued executive branch inaction was fast disappearing, unless there was to be more buck-passing back to the Treasury, the White House or over to Congress again.



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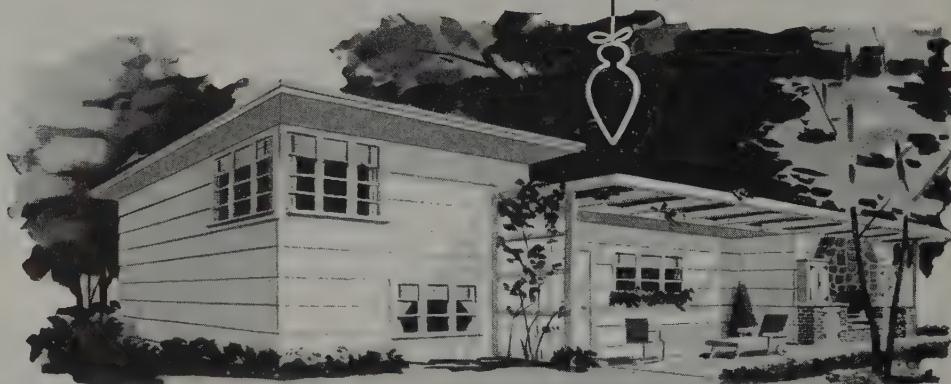
Builder lifts sales with ad for house at '\$1.63 a day'

Builder Wellborn C. Phillips took this full page ad Feb. 22 in the Orlando (Fla.) Sentinel-Star playing up the fact that his two-bedroom home cost a buyer only \$1.63 a day. The result: almost 5,000 persons inspected his subdivision (five times the usual turnout), bought five of his \$8,500 and \$9,500 FHA houses. Later that week, he sold another 14—a sizable increase above the norm. For his next advertising spurge, Phillips planned to point out that his houses cost less per pound than hamburger.

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Permanent protection in all climates. This durable all-wood hardboard never rots or corrodes.

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No short lengths! Packaged in convenient 8', 10' and 12' lengths. Conventional 12", wider 16" and extra-wide 24" widths at no premium. $\frac{5}{16}$ " and $\frac{1}{4}$ " thicknesses.

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Compulsory warranty bill introduced in House

Despite builder opposition, chances that Congress might enact a compulsory one-year warranty for FHA and VA houses looked a little better than even this month. Rep. Albert Rains (D, Ala.), who introduced the warranty bill, told *HOUSE & HOME* he sent copies to members of the House banking committee, that "their reaction generally was favorable." He added: "I think Congress will pass it."

Congress votes Title I its usual last-minute increase

To accommodate the record volume of home repair and improvement business confronting FHA throughout the country, Congress gave speedy passage last month to a bill boosting the Title I insurance ceiling by \$500 million to \$1.75 billion.

As usual, the shot in the arm came just in time to keep the patient from dying. Since September, Title I had been limping along on \$75 million a month in repayments. Applications were running over \$100 million. By late January, FHA faced a backlog of 260,000 loans aggregating \$195 million. FHA Commissioner Walter Greene warned Congress that the program faced imminent suspension.

Thus needed, Senate and House banking committees kept hearings short, ruled out most amendments to avoid delaying the legislation. Sample: Reps. Abraham J. Multer (D, N.Y.) and Albert Rains (D, Ala.) expressed concern over the cost of Title I loans (the \$5 per \$100 discount is equivalent to 9.7% interest). Commissioner Greene explained that this was lower than the going rate on similar loans without government insurance. There were misgivings, too, because Title I's \$2,500 loan limit on single-family houses is too low to make it widely useful in rehabilitating slum housing. Greene agreed an increase might be helpful.

US appeals court upholds glaziers' make-work bylaw

Glaziers observing a union bylaw that forbids work on jobs containing preglazed sash are not striking or violating unfair labor practice provisions in the Taft-Hartley Act. So ruled the US Circuit Court of Appeals for Chicago last month (where the make-work practice is common). At issue was a 1948 suit of the Joliet (Ill.) Contractors Assn. against AFL Glaziers Local 27.

Contractor Attorney Charles M. Price called the verdict "astounding." He said it would be appealed to the Supreme Court.

Vacancies bring cuts in defense housing; relocatables to be tested at five bases

Builder complaints of vacant defense housing (H&H, Feb. '53, News) spurred HHFA to cancel or cut back programs in at least nine areas last month. And Ass't Administrator Neal Hardy revealed that Federal National Mortgage Association, which holds the mortgage on most defense housing, was preparing to announce a policy of suspending mortgage payments while defense homes remain unfilled. But unless the mortgage is written for less than the legal 30-year limit, the monthly rate of payment will have to be hiked above the original schedule later, Hardy noted. The law gives FNMA no alternative.

The reason 5% of the nation's 30,646 completed defense housing units still stood vacant (in some spots, vacancies ranged from 50% to 98%) was that nobody had adjusted housing plans to shortfalls and stretch-outs in defense build-up plans. Most of the blame belonged to the Pentagon for oversecrecy. The awkwardest snafu involved Camp McCoy, Wis. In Nov. '51, HHFA programmed 225 units there, of which 193 were started, 130 completed. Last month, the Army deactivated the post.

It was good news to devotees of better defense housing last month when HHFA at last announced that Ralph Kaul's relocatable housing program (H&H, June '52, News) was starting its biggest test. At five remote military bases, 608 units of relocatable housing will be bought by the government, rented to civilian and military personnel as a demonstration. Kaul hopes that "relocatables have longer life, lower maintenance cost and a higher rental value" than PHA's temporary housing. Although Kaul expects the relocatables to

cost about 30% more (at about \$7,700 each) than PHA temporaries, he is convinced they are a better buy. Relocatables can be dismantled cheaply, trucked to another site and quickly reassembled, if they are no longer needed where originally erected. The test assignments: Camp Stewart, Ga., 258 units; Hawthorne, Nev., Hanford, Wash. and Twenty-Nine Palms, Calif., 100 units; Dahlgren, Va., 50.

Canada plans community of Levittown size

A Canadian community that could rival the US Levittowns was being planned this month. On a site ten miles northeast of Toronto, said Pres. Leonard W. Finch of Trusteel Corporation of Canada Ltd., would rise 12,000 steel-framed homes priced from \$10,000 to \$100,000 for workers and executives at nearby factories. The resulting town would have a population of 45,000 to 60,000. The backer, E. P. Taylor, Canadian brewer, was keeping details under wraps.

Huge Fairless city urged to solve tax dilemma

Booming Bucks County, Pa. site of US Steel's Fairless works, was suffering growing pains. Nine boroughs and eleven townships in the area had a population of only 75,000 in 1950. By the end of next year it will swell 70,000 in Levittown alone, another 20,000 in Fairless Hills.

Except for Falls township, which includes the \$400 million Fairless works but few homes, the problem of municipal incorporation has posed a dilemma for every community. Township and borough lines, drawn more than a century ago, conform



RELOCATABLE DEFENSE HOUSING at Camp Stewart, Ga. will have a spacious five-to-the-acre site plan—one of the best in the US defense housing program. Pressed Steel Car Co. of Chicago is selling the government 193 two-bedroom units and 65 three-bedroom units for \$2,132,825. The site preparation will cost another \$218,000. Houses are of stressed-skin plywood.

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Does it operate at low cost? *You can have it in an air-cooled model that uses no water!*

And yes, it's completely packaged, completely serviceable from the front!

Like to hear more? Write, we'll tell all! Carrier Corporation, Syracuse, New York.

P.S. to Architects: The big \$27,800 Carrier Weathermaker Home Competition closes April 10. Better get your entries in!

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to rural conditions. If followed today they would seldom provide enough tax bases for new schools and other services required for large, almost exclusively residential developments.

Last month, the Philadelphia Housing Association suggested the obvious answer: incorporate the entire area (one and a half times the size of Philadelphia) as a single municipality, so taxes from industrial development would help everyone. The reaction so far: lukewarm. Sample: Bristol township commissioners asked Pennsylvania University's Institute of Local and State Government to study the idea.

Baltimore slum plan told in documentary movie

As the Baltimore Plan for slum rehabilitation became a rallying point for private industry's fight on urban blight, a documentary movie was an obvious answer to the need for explaining its complexities to people in other cities. Two years ago, Baltimore businessmen and the University of Chicago each put up \$15,000 and *Encyclopedia Britannica's* film division began shooting.

The resulting 20 min. sound film was premiered last month in Baltimore before an audience of 1,000 who paid \$1 apiece which was contributed to the "Fight Blight" fund. The city's reaction was one of restrained enthusiasm. Said the *Evening Sun*: "As the film is shown to ever widening audiences the same old debate is certain to arise: how good is the Baltimore Plan in actual practice? The film does not provide the answer; it is too early to measure the permanent effects of the 27-block cleanup. . . . But the Baltimore Plan, for those who view the film without prejudice, is not presented as a final answer to the slum problem. The plan is not a plan but an approach, and one that has constantly changed to meet new needs. The film shows innovations that six years of experimentation have brought forth, from establishment of a housing court and a special squad of police sanitarians to organization of a businessmen's group [Fight Blight Fund] to help finance repairs by impoverished home owners who cannot afford the plumbing and carpentry which housing law enforcement necessitates."

Final answer or not, the movie showed immediate signs of becoming a hit. By the time it had been screened on TV in Baltimore and New York a week later, President V. P. Arnsperger of *Encyclopedia Britannica* Films reported he had requests for it from as far off as Halifax. The film sells for \$85 (\$100 after April 1) or can be rented for \$4.50 for three days.

NAHB hires chief of Baltimore slum plan; Ohio court upholds redevelopment law

Homebuilders this month began carrying out their pledge to "crusade" against urban slums (H&H, Feb. '53, News) by hiring one of the best-qualified men in the nation to help them.

Back in 1941, Baltimore's health commissioner hired an intense young man with a missionary spirit, G. Yates Cook (now 43), as the city's first \$1,800-a-year housing code inspector. In the years that followed, Cook as much as any man led Baltimore's pace-setting attack on slum rehabilitation. On March 31, he will quit as the \$6,900-a-year director of the housing bureau of the city health department to become head of a new NAHB housing rehabilitation department.

Said Cook: "I will not be a spokesman either for or against public housing. I will set up as a consultant to any city and will evaluate their present services and see how they can be brought to operate efficiently." The best formula, Cook is convinced after 12 years of wrestling with it, is for slum clearance and housing code enforcement to be given the power of being a separate department reporting directly to the mayor.

While vacationing in Miami, Cook last year helped persuade it to set up the nation's



Bond Bros.

COOK

first such department. That example was undoubtedly on his mind when in January he resigned after a head-on clash with Baltimore Health Chief Huntington Williams, who has squelched efforts to put the Baltimore Plan on that basis.

Baltimore's loss was the nation's gain.

Title I upheld. Redevelopment, the other arm of slum clearance, won an important legal victory. Ohio's Supreme Court affirmed last month that "elimination of slum and other conditions of blight and provisions against their recurrence [are] . . . conducive to the public welfare and a public purpose." It ruled 6 to 1 that Cincinnati's balking mayor and finance director must sign notes authorized by the city council to start a \$3 million urban redevelopment project with federal Title I aid.

The court overruled objections that 1) a fractional part of the site could not be condemned because it was not substandard, and 2) resale to developers for private operation and profit after being acquired for a "public purpose" would violate constitutional property rights.

Constitutionality of the state's urban redevelopment law, which even some of its proponents regard as having questionable sections, was not pertinent to the case, the court noted, although it observed that "the validity of urban redevelopment projects similar to the project involved . . . has been uniformly sustained by the courts of last resort in other states. . . . On'y one [Florida's] has held to the contrary."

Baltimore breaks ground for nation's first redevelopment housing by a local builder

"FHA Sec. 207," insisted FHA Boss Walter L. Greene at January's NAHB convention, "is a workable title for low-rent housing." Most builders, if they did not disagree flatly, at least viewed his assertion skeptically.

Last month, Baltimore gave Walter Greene corroboration. On Feb. 11, Mayor Thomas D'Alesandro Jr. and his Redevelopment Commissioner broke ground for 321 units of Sec. 207 garden apartments in one of the first Title I slum clearance redevelopment projects involving a local private builder and locally arranged financing.* Said D'Alesandro: "This has been a real job of pioneering. I hope other redevelopment projects will follow more easily and quickly now that basic policies and procedures have been worked out." Swinging the deal had

taken three years of maddeningly tedious planning and negotiation with the city, HHFA and FHA.

Plan in '49. The idea of rebuilding the 27 block island of slums with federal aid began taking shape early in 1949. It took only a year to negotiate a lease on the land with the city, even less to get a commitment from FHA under the now defunct Sec. 608. In May 1950, Baltimore's board of estimate gave its approval. In July, the city voted to condemn the 197 ramshackle homes (51% Negro occupied, 49% white).

But it took HHFA's redevelopment division another ten months to approve the acquisition, and 22 months to come up with a form of contract for the federal grant (for Waverly: \$1.1 million) toward site purchase. While the turtle-paced process of acquiring the condemned land dragged on, Sec. 608 died and for awhile the whole

* Almost all Title I redevelopment housing projects begun so far have either been city-built or financed by a big institutional investor.

RICHMOND HOMES

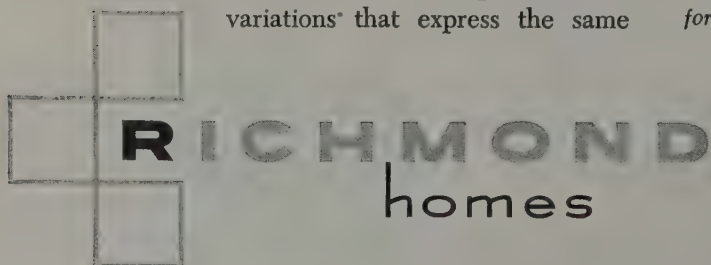
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project hovered on the edge of collapse. A year ago, Mortgage Banker James Rouse began all over again to negotiate an FHA commitment under the live but less favorable Sec. 207. Planners pared down floor plans and specifications, but slow-gaited FHA took more months to make two vital, pace-setting decisions: a 6½% capitalization rate (instead of Baltimore's usual 7%), a vacancy rate computation of 3% for the first three years (with the standard 7% thereafter). Without them, the project would have died. Irving Trust Co. of New York took the \$1,851,300 mortgage despite its unattractive 4% rate. The final hurdle was crossed in January: at FHA's insistence, developers renegotiated the land lease from 60 to 75 years.

Pace-setting lease. In leasing the land, the sponsoring Waverly Apartments Corp. arranged a deal which should set an example for other cities. A year's rent will be 4% a year of the land's \$100,000 appraised value. When the original lease was signed with the city in 1950, the corporation put up only \$8,000—two year's rent—as good faith money. To a redeveloper, that was far different from the hazard of agreeing to buy and not knowing, because of the uncertainties of dickering with the government, how long the \$100,000 purchase price might be tied up unproductively. After 40 years (the mortgage is for 39 years, 7 months), the city has the right to buy the project.

Waverly's units will rent from \$68 a month for 4½ rooms to \$50 a month for efficiencies (including water, but not heat and other utilities). The two- and three-story frame-and-brick veneer apartments will be built by Harry Bart, president of the sponsoring corporation.

Profits drop for building materials manufacturers

Reflecting the drop in physical volume of construction in 1952, profits of 10 of the 13 top building product manufacturers sagged from 2 to 54% below 1951 levels. Sales also dipped, but generally not so much as net income.

COMPANY	PROFITS		% CHANGE
	1951	1952	
American Radiator-Standard			
Sanitary Corp.	\$22,027,024	\$18,000,000	-18.3
Celotex Corp.*	3,497,371	1,612,043	-53.9
Flintkote Co.	5,516,371	4,896,373	-11.2
General Electric Co.	138,116,527	151,719,905	+ 9.8
Johns-Manville Corp.	24,530,509	22,619,951	- 7.8
Libbey-Owens-Ford Glass Co.	15,476,754	14,907,893	- 3.7
National Gypsum Co.	7,395,983	7,249,480	- 2.0
Owens-Illinois Glass Co....	17,022,816	16,200,820	- 4.8
Pittsburgh Plate Glass Co...	31,075,981	36,771,925	+18.3
Westinghouse Electric Corp.	64,578,202	68,581,603	+ 6.2
US Gypsum Corp.	19,820,261	19,031,216	- 4.0
US Plywood Corp.†	4,326,600	4,253,700	- 1.7
US Steel Corp.	184,359,787	144,283,522	-21.7

* Year ending Oct. 31.

† Nine months ending 1/31/52 and 1/31/53.

FHA administration rapped; three officials quit after quiz

FHA administration struck more squalls last month:

► Rep. Paul F. Schenck (R, Ohio), a Dayton realtor, told the House "it takes three weeks to get a conditional commitment from the Cincinnati office and that's too long." He said he will ask the new HHF Administrator to investigate why FHA offices everywhere are slow moving.

► When word leaked out that the FBI was investigating FHA's Maryland district office, Commissioner Walter L. Greene announced two resignations: State Director E. Lester Muller, 63, and Chief Architect J. Hamilton

Walker. Greene said they quit after FHA's Washington staff asked explanations of "certain personal dealings with individuals having business before the FHA." Muller, with the agency 17 years, insisted he retired solely for his health's sake. Walker's only comment was: "I had 15 years service and was eligible for a pension."

► A Congressional hearing (see p. 41) unearthed the hitherto hushed-up news that Clinton C. Staples, FHA director in Alaska, was permitted to resign a year ago (during Franklin D. Richards' term as commissioner) after investigators accused him of accepting gratuities from a builder, making a trip to Seattle for an operation while telling his superiors it was on business.

Five-year rent guarantee planned to induce foreign builders to house troops overseas

For American servicemen stationed in NATO nations, housing has been a nightmare. As one Air Force officer in eastern France said, "I've got a lovely château. Twelve rooms. No bath."

In the touchy relations between the US and its allies it also has been virtually a diplomatic issue. Pressure of their families on local housing markets created local animosities against American troops. Yet gouging foreign landlords sent many a US serviceman home more anti-European than when he came.

Last month a happy solution was crystallizing. It was calculated to please practically everyone: US troops and taxpayers, foreign governments, citizens and builders. If all went well it could provide new apartments for US servicemen in many populous spots overseas (demountable prefabs in remote areas) without costing US taxpayers a dollar except for administrative costs.

Local money, builders. Nub of the plan was to woo local foreign capital into financing the housing. To do it, the US would guarantee foreign builders five years rent at levels high enough to reduce their investment (perhaps by ½) to what could be supported by the lower rents local tenants could pay after US servicemen depart. (In France, for example, a generation of rent control has left rents as low as \$110 a year.)

Congress approved the principle last June when it appropriated \$100 million for the rental umbrella. Since then, Defense Dept. officials led by Armed Forces Housing Chief Thomas P. Coogan, a wizard at ways and means, have been developing the details. This month the scheme needed only final approval from Senate armed forces subcom-

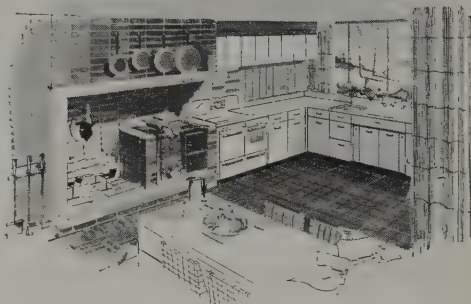
mittee before going into action. Two large projects in France and one in Italy were ready for groundbreaking. Four others in France were in advanced planning stages.

Under Coogan's plan, each builder or "sponsoring group" would lease or buy his own land, provide his own plans, obtain his own financing (which in France might cost around 10% interest). To prevent speculation, the US would insist on firm financing commitments before it issues a guarantee, which would not be negotiable. Plans would have to conform to foreign building codes and zoning as well as US specifications. Roughly speaking, FHA standards would apply: 850 sq. ft. minimum for two-bedroom apartments, 1050 ft. for three bedrooms. Construction would be functional, mostly three-story buildings. All materials, including plumbing and lighting fixtures, would be foreign-produced.

Guaranteed rents would range from \$115 for two-bedroom apartments to \$125 for three bedrooms (unfurnished but with heat and hot water). For France that was an astronomical figure. High-paid labor gets \$100 to \$150 a month, pays rents from \$20 to \$25. But the rental guarantees conformed neatly to US rental allowances for soldiers. With overseas extras, some enlisted men draw \$127 a month for housing. A married major is allowed \$119 for quarters, plus \$46 for subsistence. That is what makes the plan possible.

Needed: French prefabs. For remote French areas where permanent construction was unjustified the Defense Department hoped that the same rent guarantee would produce relocatable homes for about \$8,000 each. The amortization on these would be greater, and might allow the builder to get out by selling them after five years. So far, response to this program was slow. As Le Corbusier discovered with his Marseilles apartments, French contractors know little of mass production. Either the US would have to teach them, or France would have to drop trade barriers, let German demountable homes fill the gap.

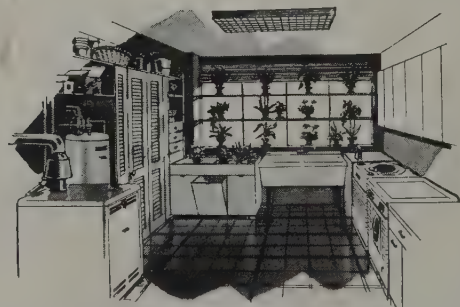
FREE TO ARCHITECTS AND BUILDERS...



Crane's Ranch Kitchen from the Crane Sketchbook of Ideas. A kitchen that "belongs" in the ranch-type home.



Crane's Family "T" Bath from the Crane Sketchbook of Ideas. Sliding partitions provide privacy in three different sections at same time.



Crane's Garden-Utility Room from Crane Sketchbook of Ideas. Combines beauty with utility because it doubles as a place to start plants.

46 original and easily
adaptable room ideas



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Crane Sketchbook of Ideas

Leaf through this book of colorful pictures and you'll quickly see how it can help you "sell" your customers on new ideas and room arrangements—easier, faster, and with fewer changes at the blueprint stage.

Here, in the Crane Sketchbook of Ideas, are 46 detailed suggestions for convenient and practical new bathrooms, kitchens and utility rooms.

Often, a person can look at one of the pictures and say, "I'd like something like that." Or, you can point to a room idea and easily explain how you could modify it or improve upon it to fit individual requirements.

These are all practical rooms—each designed by competent architects. If you wish, we can give you detailed, specific suggestions for furnishing and decorating. This whole service is yours for the asking. So get your copy of the Sketchbook from your Crane Branch or Crane Wholesaler—today!

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PEOPLE: Frank W. Cortright to build \$8,000 houses in Sacramento; former AIA president James R. Edmunds dies

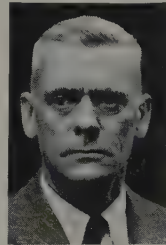
Nearly 100 realty and housing leaders packed a private dining room in Washington's Statler Hotel last month to toast goodbye to **Frank W. Cortright**, retiring at 54 as NAHB executive vice president. Cortright was a Philadelphia realtor and homebuilder from 1927 until 1942, when he became NAHB's first executive chief. Now, reducing his workload to recover his health, Cortright announced he will move to the Marin County suburbs just north of San Francisco. Complete retirement? Cortright revealed he expects to build some 100 houses a year in North Sacramento, Calif. (1,000 sq. ft. structures for \$8,000 each, \$500 cash down and \$50 a month), itself a significant comment on what one of the men who know housing best thinks of the market. Cortright recalled that *New Republic* once described him as one of the capital's "three invisible Senators" along with NAREB's **Herbert U. Nelson** (present as a eulogist) and **Morton Bodfish** of the US Savings & Loan League. Cracked dignified, towering Cortright: "We might be stupid but we're certainly not invisible."

Latest court developments in the San Diego VA home loan scandal (H&H, Jan. '52 et seq.); **Roy Edward Hegg**, who retired in December as president of the San Diego Federal Savings & Loan Assn. but remains as board chairman, pleaded *nolo contendere* on three fraud counts charging that GI borrowers were required to buy fire insurance from his agency. On Feb. 23 he was sentenced to two and one-half years in federal prison but is expected to appeal. **Vroman Dorman**, attorney and Republican National Convention delegate, pleaded innocent to four charges of perjury, defrauding the government and conspiracy to defraud. Last month he was convicted on one count, put on probation three years. Bribery charges against **Kenneth Glazebrook**, head of Mobilhome Corp. of San Diego, were dropped, but an aide, **William Bettles**, pleaded guilty to a misdemeanor charge, was fined \$2,000. **Dana McEwan**, VA fee appraiser who pleaded *nolo contendere* to a charge of making false statements, was fined \$7,000 and sentenced to two years in jail. The box score from twenty-four indictments: 15 convictions or guilty pleas, two acquittals, one dismissal, six cases (veterans charged with false statements, selling loan entitlement certificates) expected to be dropped soon.

Why does a man become a homebuilder? For President **Raymond E. Crane**, of Eljer Co., plumbing supply manufacturers,

a big reason was to keep busy the equipment of his Rimersburg (Pa.) Coal Co., where strip mining veins were playing out. Crane acquired 22,000 acres of Boca Chica Key and Key Cargo (near Key West and Miami) for two developments. His son, **Radford**, explained, the mine equipment would be ideal for grading and filling.

DIED: James R. Edmunds Jr., 62, whose unassuming but effective leadership while AIA president in 1946 gave impetus to a program for opening its membership to all reputable, qualified architects, Feb. 4 of a stroke in Baltimore. Edmunds at various times headed the institute's committee to study atomic blast effects on design, the US Chamber of Commerce's construction advisory council, the Baltimore Housing Authority and Board of *Architectural Review*. **James Carroll Blair**, 76, first president of Libbey-Owens-Ford (he retired in 1930), Feb. 1 at Toledo; **Alexander H. Ruhl**, 66, Washing-



E. G. McGrath

EDMUNDS



Harry Downard



Man-made flood from Shasta Dam inundates homes

Last winter, the first time that California's mammoth Shasta Dam was in full operation, the rains were light. Engineers kept the water release into the Sacramento River to about 36,000 sec. ft.—less than half the legal limit. People around Redding eyed the bottom land that went without flood for the first time in memory. Some,

ton real estate broker, former Resettlement Administration agent for establishing the Greenbelt (Md.) housing project and Glenn L. Martin administrator for construction of Baltimore area housing for war workers, Feb. 7 in Washington; **Les-ter N. Sanger**, senior architect of the New York Housing Authority, Feb. 22 at Sea Girt, N. J.; **Asahel Nesmith Bush**, 95, Salem, Ore. banker sometimes called the "Morgan of the West," who provided financing for builders and farmers for three generations, Feb. 24 in Salem.

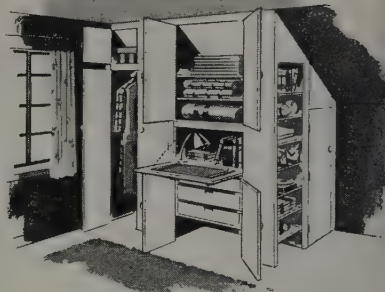
NAMED: G. J. Casey, Truscon Steel metal lath sales manager, as president of the Metal Lath Manufacturers Assn.; **Henry E. Bollman**, 37, Iowa State College architectural engineering graduate in 1940, to the newly created post of executive director of Structural Clay Products Institute in Washington; **Alexander S. Bing**, a son of one of the founders, as president of Bing & Bing, Inc., one of New York's big names in real estate; **Ray D. Murphy**, 66, executive vice president and actuary, as president of Equitable Life Assurance Society succeeding **Thomas I. Parkinson**, 71, elected chairman and executive vice-president; Executive Vice-President **H. Bruce Palmer**, 44, as president of Mutual Benefit Life Insurance Co. succeeding **John R. Thompson**, 65, who retired.

despite official warnings, bought lots and built.

When January storms filled the dam close to the brim, officials stepped up the outflow to 70,000 sec. ft. The result: some 30 downstream homes were flooded and the state began hearings to see if Subdivider Neils Tobiasson (whose tract is pictured) or his agents had violated the law.



1. **Flexible Storage Wall.** Simplicity of construction, adaptability mark this striking fir plywood built-in. Provides compact storage in small space. Box-like drawer, desk and cabinet units are interchangeable. Sections can be altered, added or subtracted to fit wall space. Cost of fir plywood to build unit shown..... **\$105***



2. **Under-Eave Storage** makes good use of usually wasted space in expansion attics, second floor of story and a half home. Unit can be made to fit any ceiling slope. Fir plywood to build it costs..... **\$95***

8 WAYS to put extra with low-cost

PLANS AVAILABLE

5. **Child's Storage Wall** helps sell parents shopping for new home. Unit has ample room for toys, clothes, bedding. Sales feature: tough fir plywood doors and drawers can't be hurt by playing children. Fir plywood to build it costs..... **\$80***



HERE are eight new ideas you can use to build your sale story right into the house. For even the most modest home can be lifted above the ordinary . . . given *extra* sales appeal with low-cost fir plywood built-ins.

Fir plywood built-ins far more than pay for themselves. They sell houses faster—and at better prices. See how little you pay* for fir plywood for each of these built-ins.

And when you plan with plywood, you make the built-in fit the house—*exactly!* No bothersome juggling of “stock” units. Fir plywood is easy to cut, fit, fasten. Paint it with popular modern accent colors to compliment your interior . . . or use light stains to feature the real wood grain.

Get detailed plans for each of these eight sales-clinching built-ins from your local lumber dealer—or write Douglas Fir Plywood Association, Tacoma 2, Washington. Please order plans by number.

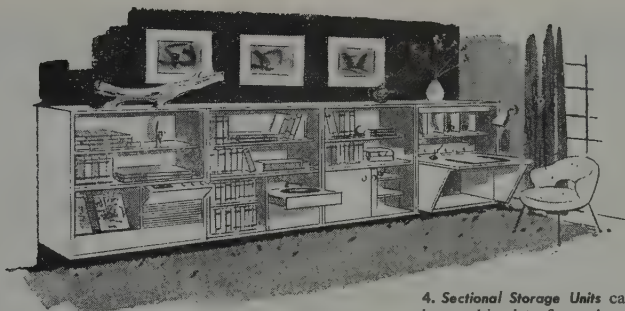
Douglas fir Plywood



This trademark identifies quality-tested PlyPanel®—the versatile “one-side” grade of interior fir plywood. Other grades include “two-side” panels for uses where both sides of panel will be seen. For outdoor use, specify Exterior-type fir plywood. EXT-DFPA® on panel edge means 100% waterproof grade.

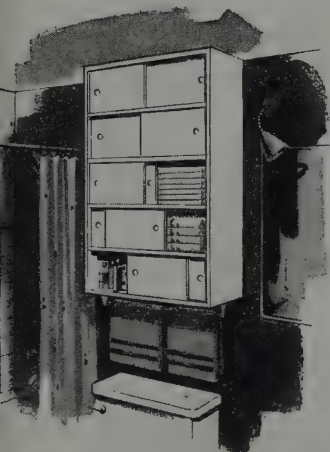


3. **Shelf-Door Wardrobe** combines features of roomy closet, dresser and chest of drawers. Use it to help sell your house faster. Can be used in any room. Build it with fir plywood for only.....\$55*



4. **Sectional Storage Units** can be combined to form shoulder-high storage wall for living room or den. Sections can be pre-built, installed on job. Fir plywood you'll need to build it costs.....\$90*

sales-appeal in your homes fir plywood built-ins



7. **Odds and Ends Cabinet** will appeal to your women customers. Use it to reclaim waste space above water closet or hang in kitchen or utility room for extra storage space. Get fir plywood to build it for only.....\$8*

6. **Island Entry Wall** at right defines entry and living areas without confining either. Adds feeling of spaciousness. Saves building costs by replacing conventional wall and entry closet. Fir plywood to build it costs... \$100*



8. **Demountable Music Wall** is ideal for custom homes built for music lovers. Simple, interchangeable fir plywood boxes are stacked on low plywood table. Holds radio, record player, albums, TV. Fir plywood you'll need to build it costs.....\$60*



*Based on latest available Chicago retail sales for fir plywood compiled by leading trade magazine, prices may vary throughout nation depending upon location and source of supply

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J. M. Snyder's G-E "Young America" Home in Long Hill, Connecticut.

Builder Wins National Award!

J. M. Snyder & Sons, builders in Long Hill, Conn., won First Prize in the "Small Builder" Group of the recent Annual Merchandising Contest. Read how you, too, can capitalize on this success story in the months to come.

J. M. Snyder & Sons is a "small" builder who constructs no more than 5 houses each year. Not only alert to the latest in modern design and sales features . . . he is also interested in ways of merchandising his homes to the public.

Nor is the Snyder experience an isolated case!

All over America builders—large and "small"—have erected General Electric "Young America" homes . . . and all over America prospects come in droves to see and buy.

We shall be glad to work with you—as we have with Mr. Snyder.

Here are some of the ways we be-

lieve we can help you sell houses faster and more profitably:

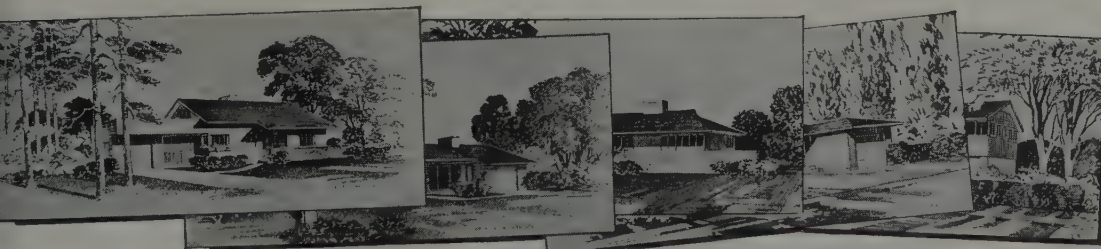
1. Available to you (and shown below) is a folio of 5 new "Young America" House design suggestions by Victor Civkin, AIA. Get full details from your G-E Kitchen-Laundry distributor.
2. Also available are complete promotion plans for the opening of your model house. These provide tested and successful publicity, advertising suggestions for newspapers, radio, television and bill-

boards, and cooperative advertising!

3. Finally, take advantage of the services of your G-E Distributor Builder Specialist who will work with you, and place before you all the builder sales experience of the General Electric Co.

Never before has any manufacturer presented any builder with such a wonderful opportunity. Better get the facts today—*and we mean today.* Address: Home Bureau, General Electric Company, Louisville 2, Ky.

GENERAL  ELECTRIC



MARLITE WOODPANEL

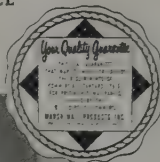


for the beauty of fine, fully-finished woods at far less cost!

Dens, recreation rooms, libraries, living rooms, offices, corridors, waiting rooms, bars, lounges, and hundreds of other interiors quickly respond to the *practical beauty* of Marlite Woodpanel.

The high-heat-baked finish is unharmed by alcohol, fruit juices, and boiling water . . . cleans with a damp cloth . . . never requires painting or redecorating . . . cuts maintenance costs to the bone. Seven beautiful patterns, authentic reproductions of fine woods, are priced well within the modest budget.

Plan on Marlite Woodpanel. It's a sure client pleaser for beauty, permanence, and economy. See genuine Marlite at your lumber and building materials dealer. MARSH WALL PRODUCTS, INC., Dept. 322, Dover, Ohio. Subsidiary of Masonite Corporation.



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plastic-finished
WALL and CEILING PANELS

LETTERS

ROUND TABLE PROGRAM

Sirs:

I hope that some day when the Administration gets right down to working out what they want to accomplish, they will get much use from the comments (H&H, Jan. '53) that have been made at the conferences and put together by H&H, which both H&H and I have forwarded to them.

AKSEL NIELSEN, president
The Title Guaranty Co.
Denver, Col.

Sirs:

I believe that much progress can be made in the broad field of housing through frank discussions.

As to the recommendations, I liked most of them. The puzzling question of interest rate remains unsolved in my opinion. I think perhaps the reason for it is that those who claim the necessity of a higher rate fail to justify their arguments. For instance, I have heard the claim made repeatedly that the only way to obtain an active home mortgage market was through higher interest rates, particularly for GI loans. Yet I know that each year we have built a million units or more. Regardless of how hard the money market may have seemed, when the final count was taken we found that the number of units built was about what we thought ought to be built in a single year.

Bert King of the VA tells me that he is handling about 30,000 GI home mortgage loans each month. Mind you, this is being done with a 4% rate.

I rather feel that some plan should be worked out whereby the interest rate might be variable. I was impressed a few years ago when Bill Clark came up with his formula, although I think there were some bugs in it. I have not thought it through clearly, but just of late I have been wondering if there might not be some kind of recognition of the sale of home mortgages in the open market at a discount rate which, in effect, would provide the flexibility to meet changing money market conditions. Under this plan, of course, the interest rate would remain rigid.

SENATOR JOHN SPARKMAN
Committee on Foreign Relations
Washington, D. C.

FIGHT AGAINST SLUMS

Sirs:

Your article on Chicago's pace-setting conference on conserving urban areas nearing blight (H&H, News, Jan. '53) is a contribution toward the solution of this problem. Almost nothing can be done without an enlightened and aroused citizenry.

BYRON C. SHARPE
695 Vernon Ave.
Glencoe, Ill.

Sirs:

We agree that we seem to be entering an era of city-consciousness.

continued on p. 64

**ARE
SLOW SALES
TRIMMING YOUR
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American Houses offer you proved sales appeal

You won't be gambling on sales appeal when you build American Houses. Every house designed and supplied by American Houses, Inc. is packed with salable features that have attracted buyers to thousands of homes built by our methods all over the country.

No matter how large or how small your home building project may be, you get the benefit of this broad proving ground of actual experience. American Houses' know-how is reflected in the plan, construction, styling and finish of each basic model. It's your assurance of quicker sales.

Ask any builder who has had experience with American Houses—he'll tell you about their other advantages, too—lower on-site labor costs, better prices from sub-contractors, quicker capital turnover.

It will pay you to get all the details about the American Houses' plan before you break ground for another house.

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American Houses, Inc.,
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Please have your representative call to show me how you can help me solve the problem of

- ☐ High costs on sub-contracts
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I expect to build _____ houses this year.

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Stately lines of the house are eloquent reminders of the traditions of the old South. Honeywell Zone Control installation is indicative of the trend toward wintertime comfort that has become evident in the new South.

EVEN IN THE SOUTH

HONEYWELL

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 HELPS CREATE

Ideal Indoor Climate For The Traditional Home

*Now you can give your clients the exact temperature
they want—in every room—with Honeywell Zone Control*



THIS handsome house, located on a wooded hill overlooking the campus of the Georgia Institute of Technology in Atlanta, is the home of the president of the institution. Colonel and Mrs. Blake R. Van Leer have lived here since the home was built in 1948.

In keeping with the latest development in comfort, the house is equipped with Honeywell Zone Control.

When the Van Leers, working with the Atlanta architectural firm Toombs and Creighton, had developed the floor plan, they realized no ordinary heating control system would do.

As Mrs. Van Leer, herself a graduate architect, puts it, "We saw that we had three separate heating problems—living, service and sleeping. The only way to insure wintertime comfort—even in our relatively mild climate—was to consider each of these three areas as separate heating zones."

This was done, with a separate thermostat system controlling each of the three zones.

And today, no matter what the winter weather, the Van Leers and their guests enjoy the right degree of warmth—in all parts of the house.

So why don't you find out more about Honeywell Zone Control—and specify it in the homes you design? Then you'll be helping your clients enjoy ideal "indoor climate" all winter long—in any weather.



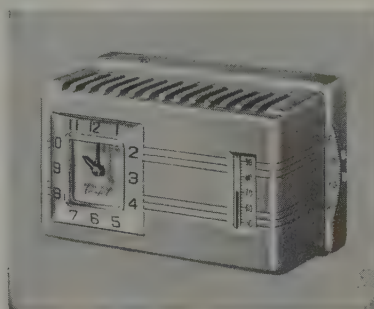
An individual thermostat in the spacious living area of the Van Leer home (heating zone 1) easily compensates for solar radiation on sunny winter days—without making the rest of the house uncomfortably cool. And the setting can be lowered to insure comfort even when the room is crowded with people at a reception without affecting temperatures in the rest of the house.



A separate thermostat in the upstairs sleeping area (heating zone 3) keeps bedrooms healthfully cool at night. And during the parts of the day when these rooms are not in use, temperatures may be lowered to save fuel—without upsetting the comfort balance in either of the two other zones.



2nd floor plan



HONEYWELL
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THERMOSTAT

Owners say the Honeywell electric or electronic clock thermostat is wonderful because it turns down the heat—automatically—when they go to bed, and gives them a nice cool room to sleep in; turns up the heat—automatically—while they're still asleep, and their home is warm when they get up. Saves them fuel, besides! The clock thermostat is ideal for use with zone control.

Only with Zone Control can you

1. remove wintertime chill from rooms with large glass areas—without overheating the rest of the house.
2. maintain special areas of the home (bedrooms are a good example) at low, fuel-saving temperatures when they're not in use—without underheating living areas.

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Dept. HH-3-48

Minneapolis 8, Minnesota

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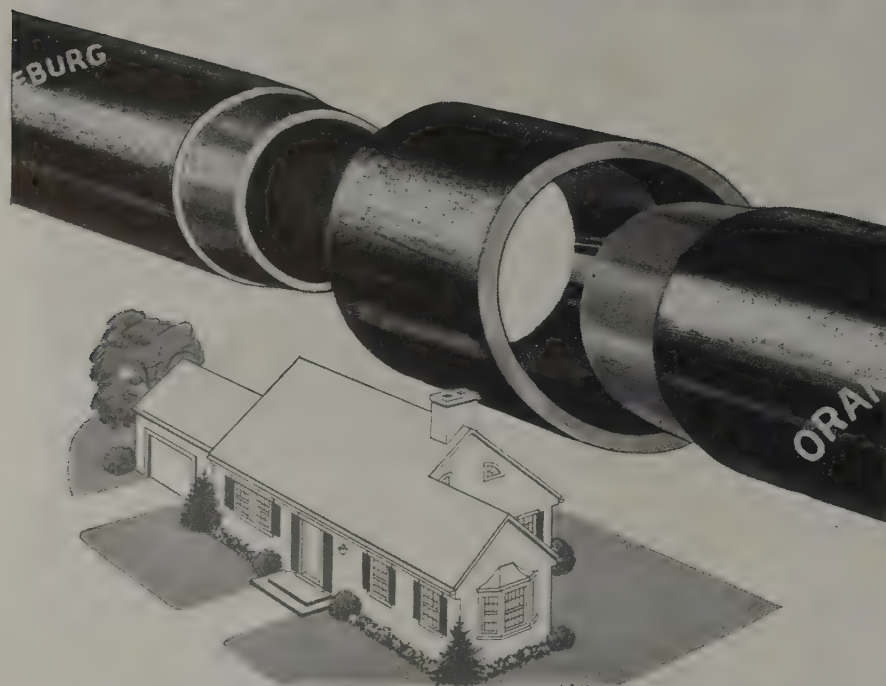
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Zone.....State.....

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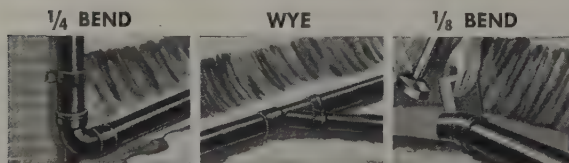
**You can rely on Orangeburg
for trouble-free root-proof pipe lines.**

Orangeburg is the modern non-metallic pipe — strong, tough, resilient. It resists the acids, alkalis, salts and oils found in soils and sewage waste. It withstands freezing and thawing without cracking or breaking.

The Taperweld® Joints are self-sealing. No cement or compound is required. Joints stay tight, sanitary.

Builders, engineers, architects use Orangeburg root-proof pipe extensively for house to sewer or septic tank; for down spouts, storm drains; tight joint drainage lines; potable water supply (non-pressure)—non-pressure outside uses. More than a hundred million feet in use prove its dependability.

You save time and trouble installing Orangeburg root-proof pipe. The 8 foot lengths are easy to handle—the fittings, 1/8 and 1/4 Bends and Wyes, are made of Orangeburg material and are tooled for easy-to-assemble Taperweld Joints.



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ORANGEBURG PERFORATED PIPE Has many uses too!



Use the Perforated for septic tank beds; foundation footing drains; draining wet spots in lawns, drive-in theatres, athletic fields, parking lots, airports. Joints are made with snap couplings that keep pipe in line and prevent silting.

Look for the name Orangeburg. Orangeburg is the pioneer—the leader—of this modern type of pipe. Specify it for trouble-free pipe lines.

Send to Dept. HH3 for catalog 306

LETTERS *continued*

We hope that the research project which resulted in the conference will produce some of the answers cities are beginning to seek.

DOROTHY L. RUBEL, *director*
Metropolitan Housing and
Planning Council of Chicago

Sirs:

...I believe that coverage of conservation problems by magazines such as yours is essential to the solution of the problems facing declining neighborhoods in cities like Chicago. One of the great problems facing any group working in neighborhood conservation is to make the people living in these neighborhoods, and neighborhoods which in a few years will be considered conservation neighborhoods, realize what they are up against.

JOHN W. BAIRD
Baird & Warner
Chicago, Ill.

Sirs:

I am disturbed that some people these days seem to believe the job of cleaning up our cities can be done simply by the enforcement of building and health ordinances. This idea underlies your story from Los Angeles and it was reported again in Chicago at the annual meeting of the Home Builders.

Despite the honest appraisal of the Baltimore program by such Baltimoreans as James Rouse and Yates Cook, there still seems to be much muddled thinking.

MORRIS H. HIRSH, *exec. director*
South Side Planning Board
Chicago, Ill.

AN INDEPENDENT FHA

Sirs:

Naturally we are interested in what may happen to the FHA situation (H&H, Nov. '52) as we have always participated in this program. However, it looks as though the HHFA is endeavoring to force more and more social and New Deal functions on the FHA. We are concerned about this and would like to see the FHA returned to its independent status and be permitted to continue operating a straightforward insurance system as it was originally set up, which I am sure would be more beneficial to all concerned.

PAUL J. SCHULZE
The National Bank of Edgerton
Edgerton, Wis.

PREFABRICATION IN PUBLIC HOUSING

Sirs:

The aim of the PHA program is compliance with the Housing Act of 1949, assuring that decent, safe and sanitary housing for low-income families be produced in the most economical manner consistent with acceptable standards of construction, operation and main-

continued on p. 68

**Wide Acceptance of Complete
Packaged Windows Provides Unusual
Opportunity for Direct
Representatives**

by KENNETH G. NIBLACK

Fleetlite Aluminum windows have won wide acceptance across the country and now that materials are available, rapid expansion of distribution is planned according to Tom Y. Smith, President of Fleet of America, Inc. in Buffalo, New York.

Direct full time representatives operating their own business have been handling most of the sales of Fleetlite Windows. Due to proposed expansion program such opportunities are now available in most sections of the country. Established representatives have proven the profit opportunities offered by this new product.

The start of every new home or residential building points to a prospect for a sale averaging over \$1,000. A very extensive national advertising program together with local sources of information and home office help provide the leads and method of operation. The representative works through architects, builders, contractors and owners in developing his business. No investment in stock is required. No shop facilities are necessary. A growing community usually requires the help of sales assistants.

Originally engineered and introduced as the answer to all window problems encountered in Northern states, the Fleetlite double, double hung construction has now been adopted in dust bowl states because the pile mohair weatherstripping filters any air that might be forced into the house during dust storms.

Used in conjunction with air conditioned buildings, two major savings are realized; less expensive equipment will be adequate and operation expense will be lowered.

Architects like the beauty and freedom of design offered by the wide range of double hung and picture windows.

Contractors and Builders like the savings in time and labor when nailing these complete packaged windows in place.

Men interested in representing Fleet of America, Inc. on a full time basis should contact Tom Y. Smith, President; Fleet of America, Inc.; Dun Building; Buffalo 2, New York.

GET THE FACTS on the *Amazing* *Fleetlite* Aluminum WINDOWS



*Beautifully Modern
Reduces Building Time
Comes Packaged in Carton*

Offers **NEW LIVING COMFORT
EASY HOUSEKEEPING**

● Here's the revolutionary new window you've been hearing so much about... the window that builders are applauding... the window home owners are specifying — FLEETLITE Aluminum Windows. They come, packaged and ready for installation, these complete year-round units combine interior and exterior double hung windows in a four-channel extruded aluminum frame. Keep homes warmer in winter and cooler in summer.

When you build—plan for the future, insist on FLEETLITE Windows for the home owners comfort—for the added sales advantage—for protection of resale value. It costs no more to have the best.

FLEETLITE Windows are the most handsome, most practical windows in America. Get the facts for yourself — today.

WRITE TODAY for complete literature on



MADE BY ...

FLEETLITE Windows

TERRITORIES OPEN
FOR FULL TIME
FACTORY REPRESENTATIVES

As advertised in *House Beautiful*, *House and Garden*, *Small Homes Guide*, *American Builder*, *Practical Builder* and *Magazine of Building*.

Fleetlite
AMERICA'S Finest WINDOW

FLEETLITE double hung windows on each side of FLEETLITE matching picture window.



Double windows weather stripped with pile mohair give most complete protection against winter cold, summer heat or dust storms.



Block rain, adjust air flow for inside pleasure by centering the two middle sash.



Sash easily and quickly removed for washing.

FLEET OF AMERICA, INC., 102 Pearl Street, Buffalo 2, New York

NOW...RUSCO

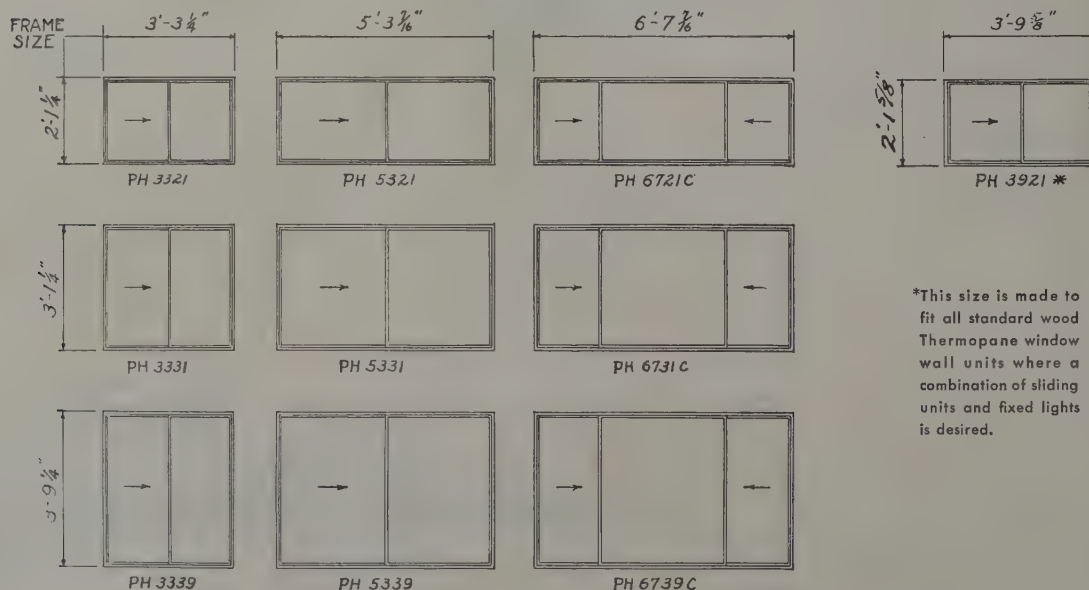
HORIZONTAL SLIDE



Rusco Horizontal Slide Windows are available in a range of sizes to fit conventional window openings. The standard unit consists of one horizontal slide glass insert with Lumite

screen panel and one fixed light. Also available in composite unit with fixed picture window and sliding right and left hand ventilating flankers illustrated above.

STANDARD RUSCO HORIZONTAL-SLIDE TYPES AND SIZES



*This size is made to fit all standard wood Thermopane window wall units where a combination of sliding units and fixed lights is desired.

TUBULAR STEEL WINDOWS!

New Addition to Prime Window Line Makes Ideal Treatment
For Added Wall Space, Bedroom and Bathroom Privacy, Above Sinks, Etc.

The F. C. Russell Company has now applied the proven engineering principles of its widely-accepted vertical-slide Prime Window to a new line of Horizontal Slide Windows. These Horizontal Slide Windows offer the same exclusive features and advantages. Frame and window members are of streamlined, rigid, tubular galvanized steel,

Rusco Prime Windows Are Fully Pre-Assembled

Factory-Painted, Hardware Attached
All Ready to Install in Window Opening

bonderized and finished with baked-on outdoor enamel. They are supplied as completely finished assemblies and provide the same ease and speed of installation and convenience during construction.

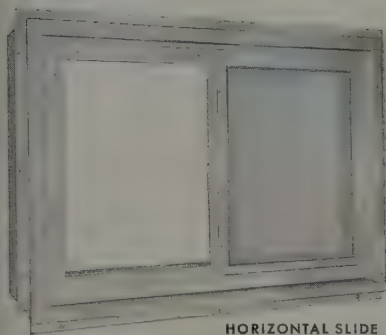
Rusco Horizontal Slide Prime Windows ideally meet design and construction requirements for high window placement, such as in ranch type houses, wherever added usable wall space is desired, and in hard-to-reach places such as over sinks, bathtubs, etc. They assure greater ease of operation at shoulder-high or head levels.

GLASS • SCREEN
BUILT-IN WEATHERSTRIPPING
INSULATING SASH (OPTIONAL)
WOOD OR METAL CASING
...OR STEEL FINIS

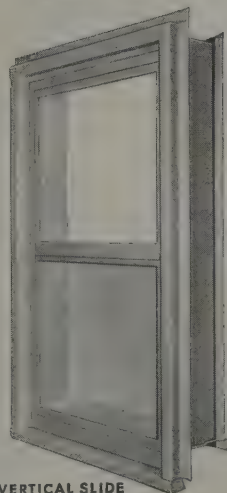
all in one unit!



Sliding Glass and Screen Inserts easily removed from inside for convenience in cleaning. The Rusco removable sash feature has tremendous appeal as a convenience and safety feature.



HORIZONTAL SLIDE



VERTICAL SLIDE



FULLVIEW

RUSCO

**Galvanized
Steel**

PRIME WINDOWS

FOR COMPLETE SPECIFICATIONS AND ILLUSTRATED CATALOG, WRITE

Department 7-MB33 THE F. C. RUSSELL COMPANY • Cleveland 1, Ohio • In Canada: Toronto 13, Ontario

For every building Large or Small

The Newest GLIDE-ALL Sliding Doors



Beautiful, Modern
FLUSH PANELS

Smooth, Gliding
OVERHEAD ROLLERS



- LOW INITIAL COST
- LOW INSTALLATION COST
- FLOOR-TO-CEILING AND STANDARD HEIGHTS
- DEPENDABLE, LONG-LIFE OPERATION
- DECORATIVE VERSATILITY

SEE SWEET'S CATALOGS FOR DETAILS

Here is the Sliding Door that meets all building and budget requirements. Glide-All Sliding Doors are economical enough for the most modest dwelling, yet with modern beauty and quality befitting the finest homes and apartments. The new Flush Panel Glide-All Sliding Doors add sales appeal to buildings at an actual savings in material and construction costs. Glide-All Sliding Doors offer a combination of beauty, economy and performance. Write for a free copy Technical Glide-All Bulletin today!

Glide-All Sliding Doors are a product of
WOODALL INDUSTRIES INC.
DETROIT 34, MICHIGAN

and are manufactured in the following Plants:
CHICAGO, 3510 Oakton St., Skokie, Ill. • LAUREL, Miss., P. O. Box 673 • NEW YORK, Glen Cove Rd., Mineola, N. Y. • SAN FRANCISCO, 1970 Carroll Ave.
Address requests to plant nearest you.

LETTERS *continued*

tenance. Wherever prefabricated housing can help accomplish these objectives, conforming to durability requirements of the 40-year financing period of local housing authority bonds, together with low maintenance and repair cost exactions, there can be no objection to its use in the program.

Actually, prefabricated housing has for many years had a place in the public housing program, and a number of temporary and permanent war housing projects have been built with prefabricated materials. There seems to be an increasing tendency in current defense housing aspects of the PHA program to use prefabrication methods, where they speed construction, to alleviate emergency situations.

Construction contracts in the PHA program are by law awarded to private builders through competitive bidding. On some occasions prefabricators, invited to bid on public housing construction, have been significantly underbid by contractors in conventional construction. The economies, claimed by prefabrication manufacturers through efficiencies unavailable to the conventional builder, were not reflected in the prices demanded.

JOHN A. KERVICK, *director*
New York Field Office
Public Housing Administration

SPLIT LEVELS

Sirs:

I rather believe you overlooked some of the fundamental reasons for the use of the split-level house (H&H, Dec. '52). First, circulation is so very easy. A central entrance hall or area can radiate to all three levels giving the same advantage that is usually ascribed by real estate dealers to the "Center Hall Colonial."

The first-floor lavatory or powder room can be omitted without hardship as no one seems to object to running up half a flight of stairs. The second half of the flight is the hardest.

Next, you make the statement that the split-level house is least expensive on sloping ground. In my experience this is not true. Though it may seem paradoxical, the split-level house does best on level ground. This brings into play its greatest advantages that the lower area can be lived in because its floor can only be 30" below grade (the legal depth limit for habitable rooms in many areas). Thus we get a lot of living out of what otherwise would be basement: for playroom, hobby room, bedrooms, study, garage (where it can be deeper if desired), and kitchen-dining area. The view out onto the garden from slightly below is most pleasant if handled properly, much like looking out onto a large flower box. The garden becomes very intimate with the interior.

But as to cost on level ground—in our area we have to place our footings 3'-6" be-

continued on p. 72

Delco-Heat helps sell Oklahoma homes

Delco Conditionairs *specified exclusively by Lawton builders*

Here's what Andy Crosby, Vice-President and Sales Promotion Director of The Lewis Construction Co., Inc., Lawton, Oklahoma, has to say about Delco-Heat. "Our sales experience indicates Delco-Heat automatic home-heating equipment offers real sales advantages in the homes we build. We are so favorably impressed that we are installing Delco-Heat in all our new homes." Hewett Refrigeration Co. is the Delco-Heat Distributor in Lawton, Okla.



Tom Lewis, Jr. (left), Andy Crosby (right)



"The home pictured here is typical of the ranch-type, two- and three-bedroom homes we built in 1951," writes Tom Lewis, Jr., President of The Lewis Construction Co., Inc. "In this particular development of 75 homes we used Delco-Heat Gas-Fired Conditionairs exclusively."



Gas-fired Conditionairs



Conversion Gas Burners



Oil-fired Conditionairs



Gas- and Oil-fired Water Heaters



Electric Water Systems



Conversion Oil Burners

Eye-appealing cabinet styling . . . competitive prices . . . General Motors dependability . . . consumer acceptance . . . a complete range of burners, warm air furnaces and boilers to meet every builder's needs—are just a few of the reasons why so many prominent builders are turning to General Motors Delco-Heat.

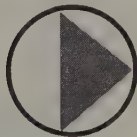
Home owner satisfaction proved in thousands of Delco-Heat installations shows that you can't beat Delco for gas- or oil-fired automatic home-heating equipment. Find out, now, how Delco-Heat can fit into your new home-building plans. See or phone your nearest Delco-Heat Distributor listed in the Yellow Pages of your phone book. Or, for complete information, write Dept. HAH, Delco Appliance Division, General Motors Corp., Rochester 1, N. Y.

**GENERAL MOTORS
DELCO-HEAT**

*For a good deal—***DEAL WITH DELCO**



*As fundamental as
woodwork finish...*



*A good plan
is always better
when it includes
symbols for
telephone outlets.*

Where you use natural woods for color and texture, *beauty starts with the finish.* And your specifications are sure to include a section on "Finishes."

Raceways contribute to the effect of the finish by keeping telephone wires out of sight. They contribute to convenience by making it possible to locate telephone outlets where they are most needed. They contribute to client satisfaction by adding a lot of extra value for a little extra cost.

It is profitable practice to include built-in telephone raceways in development as well as contract homes. Your Bell Telephone Company will be glad to help. Just call your nearest Business Office.

BELL TELEPHONE SYSTEM



"Most practical approach to year 'round conditioning ever"

say hundreds of builders who inspected Bryant's new
"COMMAND-AIRE" TWINS at NAHB Show

Builders who saw the "Twins" in Chicago have good reason for enthusiasm. For here at least is year 'round home conditioning that's . . .

20% to 35% lower in cost! We're mass producing the "Twins" to bring the price way down—to make it possible for you to offer year 'round conditioning in moderately priced homes . . . to mass-market buyers! Moreover, you can offer . . .

Cooling initially—or later! The "Twins" are independent, matched heating and cooling units. You can install and show both units in your model home and offer, in the others, the immediate or later addition of cooling according to the convenience of the buyer. And you needn't worry about space because the "Twins" offer . . .

Unusually compact design! Using as little as $7\frac{3}{4}$ sq. ft. of floor space, you can tuck them away in a closet, alcove, utility room or a corner of the basement. And you have a wide range of combinations to choose from—gas or oil furnaces ranging from 50,000 to 175,000 Btu/hr and cooling units in 2, 3 and 5-ton capacities.

Get complete information on the "Twins" today. And ask about Bryant's supporting program to help you sell your homes. Contact your Bryant Distributor or write: Bryant Heater Division, 17825 St. Clair Avenue, Cleveland, Ohio.

Bryant means business . . . better business for builders




bryant®

HEATING • AIR CONDITIONING
WATER HEATING



Where Else Can You Get This Outstanding Combination?

Exceptional Quality • Conventional Construction
and Appearance • Architect Designed Homes
• Nationally Advertised Materials and Equipment
• Budget Prices • Fast Completion on the Site
• Fourteen Models • Five Front Elevations for
Every Model • Assistance in Site Planning —
Financing — Decorating • Nationally Advertised
Homes—FHA and GI Acceptable

Attention Builders

We have openings in a number of localities for qualified builders. If you have sound financial resources and an established reputation for building well-designed, high quality homes, this is an exceptional opportunity for you. Write today on your letterhead.



7754 GREENFIELD DEARBORN, MICH.

LETTERS *continued*

low grade. Therefore in the split-level portion we use the entire foundation wall as house wall. The footings are level all the way through, and there are no stepped footings or complications. If the ground slopes, the footings must step down below the grade the same distance, and we find the foundation walls being used as foundations alone, not as walls of the usable house volume.

Please do not interpret this as meaning that split-level houses should not be built on sloping ground. They are of course most adaptable and charming, and I have done them on sloping ground many times. My point is that you get the most usable house volume for the least cost by building a split-level house on level ground.

L. MORGAN YOST, *FAIA*
Kenilworth, Ill.

WHAT'S GOING ON IN NEW CANAAN

Sirs:

Your excellent article on New Canaan (H&H, Jan. '53) has been getting good reviews from many sides of all fences. We enjoyed the coverage on our house but feel that



Owner John Weeks was not worried by Architect Eliot Noyes's design.

a point of fact should be raised, even if it spoils a story.

Having spent several years at Mr. Noyes's Alma Mater, Harvard School of Design, a few at MIT ditto, a summer pushing pencil and broom for Carl Koch, I don't feel that I could be described as "worried" about any form of contemporary design. Eliot knew this before the contract was signed so someone must have been carried away.

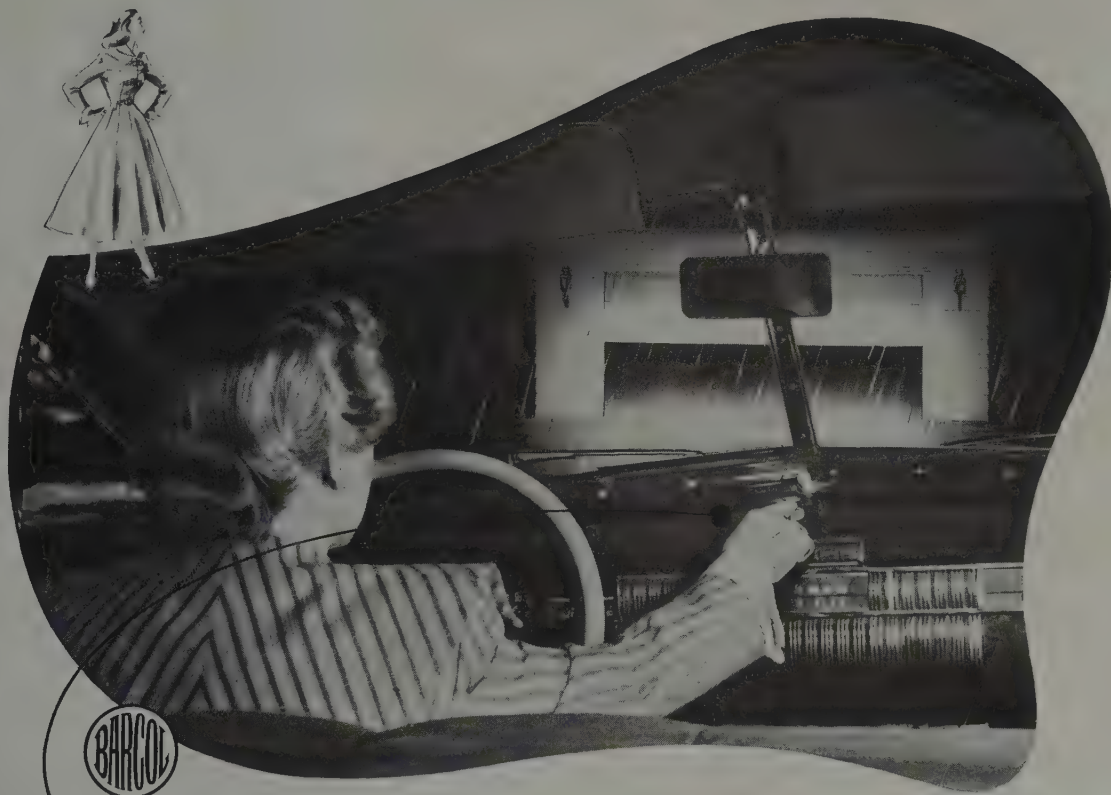
JOHN T. WEEKS
New Canaan, Conn.

UNACKNOWLEDGED AUTHOR

Sirs:

Your "Realty Ads Translated by Chicago Architects," (H&H, News, Dec. '52) puzzles and distresses me. I am an editor, not an architect. Yet the definitions of realty ad terms which appear under this heading are unmistakably mine. They were written for the newsletter of the Cliff Dwellers, a Chicago club for artists and gentlemen which Louis Sullivan, Howard Van Doren Shaw,

continued on p. 76



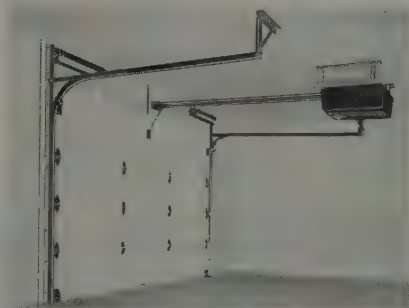
● THE MODERN WAY

TO OPEN GARAGE DOORS

*... with your fingertips
.. from your car*

INSIDE THE GARAGE IS...

An electric Door Operator with powerful motor drive, accurate limit switches, and strong linkage, that quickly and smoothly opens or closes the door at the bidding of the Barcol "Radio Control".



The modern woman, who often has occasion to drive herself home after dark, feels a lot more secure with Barcol "Radio Control" . . . the modern servant which, by the magic of radio, opens the garage doors *at the touch of a button in the car*. She never has to get out of the car to open the door. Of all our up-to-date conveniences, Barcol "Radio Control" is one of the most fascinating because it has so many features — it works at any distance up to about 75 feet, it works whether the car is moving or standing still, it works in any weather, it will close the door as well as open it, and it will turn lights on or off inside the garage and along the driveway. Be sure to specify "Radio Control" in the next house you build. Write to BARBER-COLMAN COMPANY, 156 Mill Street, Rockford, Illinois.



Highlighting the most modern home improvements...



New in this generation is the soft gleam of aluminum at eave edges and roof valleys and windows. Yet here the new is also ageless...forever immune to rust, resistant to corrosion, expressing by its modern beauty the virtue of strength with light weight. It is remarkable indeed that the metal for which demand rises so swiftly is still priced no higher than before World War II...offering 100¢ value in these 53¢ times. Beyond the established building products shown here, the ingenuity of builder and architect will discover many further applications of the modern metal: aluminum. Write for literature.

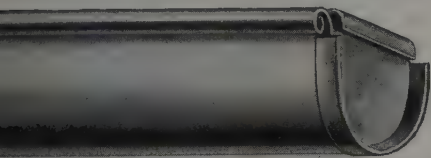
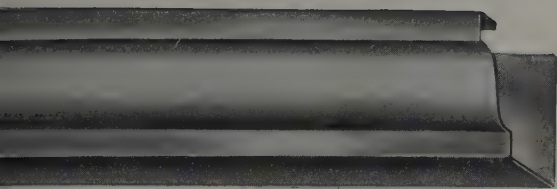
Reynolds Metals Company,
Building Products Division, 2019 So. Ninth St., Louisville 1, Kentucky.

Military needs for aluminum impose varying limitations on civilian products, but Reynolds aluminum production is rapidly catching up. Keep checking your supply source.



REYNOLDS

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC Television Network



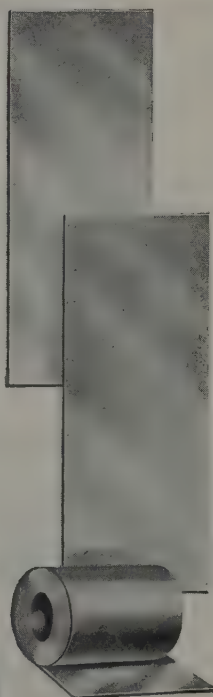
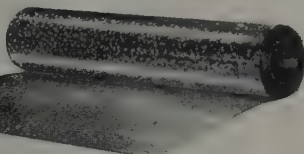
REYNOLDS LIFETIME ALUMINUM GUTTERS AND DOWNSPOUTS offer beauty and rustproof permanence at the lowest cost of any rustproof material. Slip-joint application saves labor. Available in Ogee and Half-Round 5" Residential Gutters, smooth or stipple-embossed finish—also 6" Industrial Half-Round—with downspouts and complete fittings to match.



REYNOLDS ALUMINUM RESIDENTIAL WINDOWS are outstanding in finish and design. Casement Windows in all standard types and sizes. Awning Windows with quick, positive closing feature. Double-Hung Windows with precision balances. Write for 20-page catalog showing the full line of Reynolds Aluminum Windows, complete with dimensional diagrams.



REYNOLDS ALUMINUM REFLECTIVE INSULATION—This foil-on-kraft-paper provides high efficiency, reflecting up to 95% of radiant heat...plus perfect vapor barrier. Lower cost than most bulk insulations. Foil on both sides (Type B) and one side (Type C), in rolls of 250 square feet, 25", 33" and 36" wide.

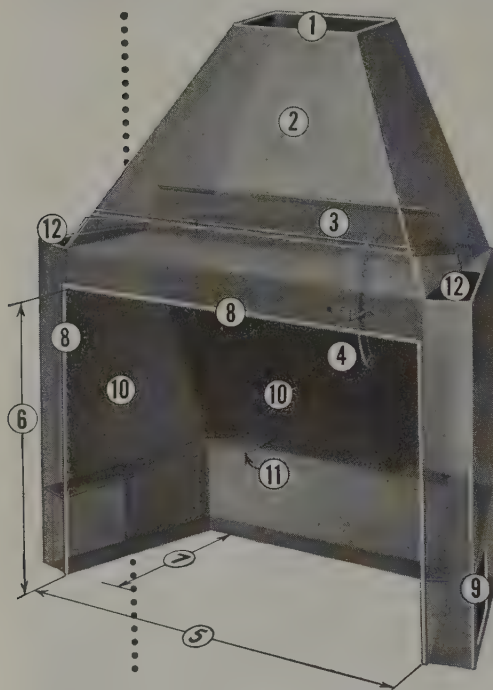


REYNOLDS LIFETIME ALUMINUM FLASHING is lowest in cost of any rustproof material, easiest to work with...and it looks best, too. Available in 50-foot rolls of 14", 20" and 28" widths; flat sheets 28" by 6', 8', 10', 12'; also in cartons of ten 18" x 48" sheets. All in .019" thickness (26 U. S. Std. Gauge).

ALUMINUM

AR "Fibber McGee and Molly," Tuesdays, NBC Radio Network.

Here are a DOZEN (count 'em!) GOOD REASONS...



...WHY you'll build a better
fireplace at lowest cost with a

Benefire® FIREPLACE UNIT

When you build your fireplace around this famous Bennett unit—you can be sure of lowest possible construction cost—highest customer satisfaction. You can actually *guarantee* a *smokeless* fireplace

1. **Flue Connection** — fits correct size of standard flue tile.
2. **Extra Large Smoke Dome** — ample capacity for the largest fires.
3. **Sure-Seal Throat Damper** — stops heat loss or down drafts when fire is out.
4. **Simple Damper Controls** — either poker-type handle or rotary-control — (exclusive Benefire feature).
5. **Opening Width** — sized to lay up with standard brick without cutting or fitting.
6. **Opening Height** — higher to give better heat, better view of fire.
7. **Opening Depth** — proportioned for adequate fuel capacity, draft safety margin, more radiant heat.
8. **Sealing Flange** — on top and both sides of opening, holds insulation in place behind masonry. Eliminates mortar joint.
9. **Cold Air Floor Inlets** — permit various possible grille locations. Sized for free circulation.
10. **Firebox Heating Chambers** — angled for greatest heat radiation and conduction. Double-welded construction.
11. **Extra Baffles** — conduct incoming cool air to heat center at firebox back wall.
12. **Warm Air Outlets** — large size for unrestricted flow. Conveniently placed for various grille locations.

with the Benefire Fireplace Unit! This modern recirculating unit places no restrictions upon exterior fireplace design — lays up faster with standard brick — gives top performance and trouble-free operation under *all* conditions. Six sizes available . . . heavy weight boiler plate steel construction throughout — with graduated weights for even heat distribution. Build your next fireplace with *Benefire*—and build a *better* fireplace!

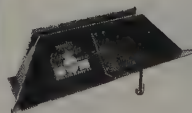
Depend upon BENNETT . . . for every fireplace need . . .



The amazing

Benefire
UNIVERSAL DAMPER

BENNETT
STANDARD DAMPERS



The damper that gives you absolute freedom in fireplace design—at moderate cost! Builds any one of six basic fireplace styles including projecting corners, three-sided openings, etc.

See your BENNETT representative
or write Dept. B, for catalog.

A complete line of standard dampers for the conventional fireplace in heavy boiler plate steel or cast iron. Bennett-engineered, Bennett-built for utmost satisfaction and economy.

BENNETT-IRELAND INC.
Chartered in 1906
NORWICH, NEW YORK

LETTERS *continued*

and Frank Lloyd Wright helped found nearly a half century ago.

There are a number of other distinguished architects among my fellow Cliff Dwellers. I cannot believe that any would stoop to filching my stuff for the Chicago AIA bulletin, from which you say you took it, without credit to the original source. An architect who would do that would steal corbels from his grandmother. May his toilets never flush.

EVERETTE EDGAR SENTMAN
Asst. managing editor
The World Book Encyclopedia
Chicago, Ill.

● Editor Sentman's definitions appeared, unsigned, in the AIA bulletin.—Ed.

ARCHITECTS IN THE MAKING

Sirs:

I have been teaching architectural drawing for ten years. Every year I have tried to get an up-to-date drawing book to teach from. I have not found any so have used up-to-date magazines. H&H has been a lifesaver.

There is only one way to believe the extent of the work a group of youngsters can do and



What a group of youngsters can do

that is to see it. The boys are at school by 7:30 and would stay until 5 o'clock if they were allowed to.

COLY CLARK
Junior High School
Fort Smith, Ark

STRONGER STAND

Sirs:

You are to be congratulated on the editorial in the Nov. '52 issue of H&H. It could have been much stronger and still have been somewhat on the conservative side. The time has arrived when if the American people are not ready to stand on their own two feet the final outcome is only a question of time. We cannot continue to depend on politically expedient agencies for survival, and the sooner that is appreciated the quicker we can rise to new high ground.

ROBERT W. TURNER, *president*
The City National Bank
Council Bluffs, Iowa

ERRATUM

Ralph Fournier who codesigned the houses in Burton W. Duenke's Ridgewood subdivision (H&H, Feb. '53) is erroneously referred to as "architect." Mr. Fournier, an architectural school graduate, is not yet a registered architect. H&H apologizes for any embarrassment caused by the error.—Ed.



Next month home buyers will see the home that was the hit at N.A.H.B.

Gunnison Homes' great new Talisman

• Just as it caught the eye of 10,000 home builders who saw it at the National Association of Home Builders meeting a few weeks ago, Gunnison Homes' great new "Talisman" will soon be the house that all America is talking about.

April is the month when the "Talisman" will be introduced to the public . . . first, in full-page full-color advertising in the leading consumer and home magazines, and, a few days later, in demonstration homes erected by Gunnison Dealers throughout the country.

IF YOU ARE A GUNNISON DEALER

... a full-color, full-page advertisement in the April 11 issue of the *Saturday Evening Post* and full-page advertisements in the April issues of *Better Homes & Gardens*, *Living for Young Homemakers* and *Household* will help you promote your demonstration home.

IF YOU'D LIKE

TO BE A GUNNISON DEALER

... write on your business letterhead for full information on this successful enterprise. We'll send you complete details on

how you can offer your customers the new Gunnison "Talisman" — truly *the home of the year*.

Gunnison Dealers RECEIVE

- Advisory financial service
- Interim financing
- FHA-VA eligibility
- Home planning service
- Technical assistance
- Elimination of architectural and material problems
- Full-page national advertising
- Sales promotion catalogs
- Local participation advertising
- Rail or truck shipments
- Prompt delivery

"Gunnison" and "Talisman"—
trade-marks of Gunnison Homes, Inc.



Gunnison Homes

Manufactured by Gunnison Homes, Inc., New Albany, Indiana

SUBSIDIARY OF **UNITED STATES STEEL** CORPORATION



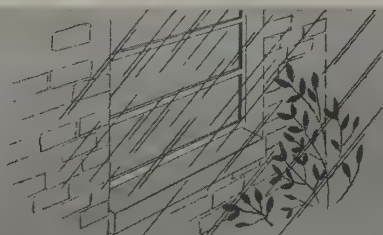
A Special Feature of all-aluminum Miami Awning Windows

Turn heavy duty aluminum operator lightly and glass vents glide outward and upward to almost 83°. Energy is transmitted evenly from patented operator to torque-shaft which in turn actuates both ends of vent sections at the same time. This feature eliminates sticking and allows free and easy operation. Closing is made tight and positive—no extra locking devices are needed.

- Pittsburgh Testing Laboratories Air Infiltration Tests 0.069 C.F.M. per lineal foot of crack perimeter at 25 MPH.



For further information write, wire or phone Dept. HH-3 or see Sweet's Architectural File ^{3c} Mi



Positive weathertight closing



Windows easily cleaned from inside



Interchangeable screen and storm window (from the inside)

Write for colorful new catalog —TODAY.

MIAMI WINDOW CORPORATION

5200 N.W. 37th AVENUE, MIAMI, FLORIDA
FACTORY No. 2 — 4610 N.W. 37th Avenue, Miami, Florida
MIAMI WINDOW CORPORATION OF MISSISSIPPI—Key Field, Meridian, Miss.
MIAMI WINDOW CORPORATION OF PANAMA—Panama, Canal Zone

MIAMI
Awning
WINDOW



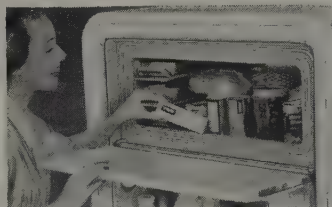
Today's homes present scores of new ideas to make living delightfully easy. In design and work-saving features the Cycla-matic Frigidaire provides a new expression of this trend.

The Cycla-matic Frigidaire with the NEW IDEAS— heads great new 1953 line

It's a true food freezer plus a roomy refrigerator—with a new kind of automatic defrosting

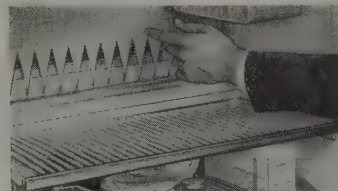
All over America housewives have discovered that Cycla-matic—offered only by Frigidaire—means a new kind of food-keeper vastly different from all ordinary refrigerators.

The Cycla-matic Frigidaire is a food freezer *plus* a refrigerator. With new automatic Levelcold. With an exclusive Refrig-o-plate in the refrigerator that defrosts automatically. You've never seen so many ideas as you'll see in this years-ahead Frigidaire—in 4 new Imperial and De Luxe Cycla-matic Models, powered by the famous Meter-Miser.



New ideas in a food freezer! Now store almost 50 pounds of frozen foods in this completely separate food freezer with its own refrigerating system. Food keeps for months—you use it when you choose. Leftovers, instead of being a waste or problem, can be saved. You

can even bake and save bread, pies, cakes. And have plenty of ice cubes in Quickcube Trays.



New ideas in automatic defrosting! Refrigerator frost is banished before it collects. Cycla-matic defrosting is the safest defrosting known.

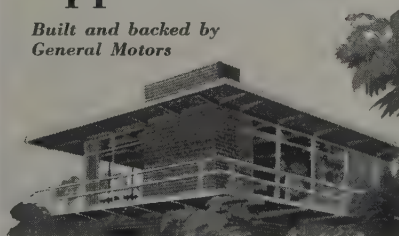
Imperial model IS-106



New ideas in fresh food storage! Butter Pre-Server in Imperial models stores butter safely—serves it sliced. Aluminum Roll-to-You Shelves glide out all the way. There are spacious door shelves. Ask about Cycla-matics and the many other new 1953 Frigidaire Refrigerators, including a brand new line of space-saving models for apartments and small kitchens. Full range of sizes from 4.4 to 10.8 cubic feet. See your Frigidaire representative or write Frigidaire Division of General Motors, Dept. 2071, Dayton 1, Ohio, for free literature.

Frigidaire Appliances

**Built and backed by
General Motors**





increases home sales

specify EMERSON-ELECTRIC KITCHEN VENTILATORS

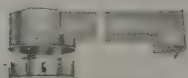
In this "odor-conscious" age, home buyers look for the equipment that puts kitchen odors in their place . . . outside the home! It's an Emerson-Electric Kitchen Ventilator . . . dependable, economical, easily installed. Specify these ventilators to give your buyers "Odor-free Air" . . . cool, clean air that increases home sales! For complete data, write for Bulletin No. T-119.

The Emerson Electric Mfg. Co., St. Louis 21, Mo.

Wall Model . . .



- Telescoping adjustable sleeve fits walls 5 1/4" to 13"
- Square outside frame, easy to brick or frame around
- Special outer door seal gives weather protection
- Induction motor, 10" blade moves 470 c.f.m.



Ceiling Model . . .

- Adjustable sleeve joint fits standard 3 1/4" x 10" duct
- Outside grille has angle baffles for weather protection
- Automatic shutter closes duct when fan is not operating
- Dependable Emerson-Electric motor equipped with special thrust bearing.

SPECIFY EMERSON-ELECTRIC ATTIC FANS



Build cool, summer comfort right into your homes by installing Emerson-Electric Attic Fans! Here is another sales-clincher . . . available in four sizes from 24" to 48". Note: you'll save half on installation by installing during original construction.

EMERSON
FANS • MOTORS



ELECTRIC
APPLIANCES

EVENTS TO COME

Prefabricated Home Manufacturers Institute's 10th annual meeting **Mar. 16-17**, Bismarck Hotel, Chicago.

Associated General Contractors' annual convention **Mar. 23-28**, Miami, Fla.

American Institute of Decorators' 22nd annual conference **Mar. 28-Apr. 2**, Waldorf-Astoria Hotel, New York.

Store-design competition sponsored by Store Modernization Institute in connection with National Store Modernization, Building & Maintenance Show, **June 9-12**, Madison Square Garden, New York. Awards total \$11,000; classes include suburban shopping center, suburban, branch department store, supermarket and various specialty shops. AIA approved; competition runs from **Apr. 6-May 18**, open to registered architects in continental US, Hawaii, Alaska, Puerto Rico and Canal Zone. For particulars write: Caleb Hornbostel (professional adviser), 80 W. 40th St., New York.

Building Officials' Conference of America, 38th annual convention, **Apr. 6-9**, Baker Hotel, Dallas, Tex.

Carrier Weathermaker Home Competition, open to architects, draftsmen and students, offers prizes totaling \$27,800 for designs of homes planned around air conditioning. Two categories: 1,000 sq. ft., and 1,800 sq. ft.; awards to be based on esthetic considerations and on suitability for use in homebuilders' development. AIA approved; Harold R. Sleeper, professional advisor. Closes **Apr. 10**.

New England Home Show combined with Modern Living Exposition, **Apr. 18-26**, at the Mechanics Building, Boston. Participating are architects, builders, mortgage interests, realtors, material suppliers and others. Home Show office: 250 Boylston St., Boston 16, Mass.

American Institute of Steel Construction's 5th annual National Engineering Conference, **Apr. 22-23**, Detroit, Mich. Sessions at Detroit Engineering Society Building, 100 Farnsworth Ave.; hotel headquarters: Park Shelton, 15 E. Kirby.

Royal Architectural Institute of Canada's annual assembly, **Apr. 23-25**, Royal York Hotel, Toronto.

Competition. Ponderosa Pine Panel Door Design Competition to obtain designs for interior panel doors suitable for mass-production methods and consistent with current standards of architectural design. Prizes total \$7,600 including \$1,000 in student and school prizes. AIA approved; closes **Apr. 27**. For program write: Ponderosa Pine Woodwork Competition Headquarters, 2907 W. Pico Blvd., Los Angeles 6, Calif.

National Savings & Loan League's 10th annual convention **May 10-14**, Chase and Park Plaza Hotels, St. Louis, Mo.

National Housing Conference's 22nd annual meeting **May 11-12**, Statler Hotel, Washington, D.C.

National Association of Building Owners and Managers' 46th annual convention **June 7-11** at Pittsburgh, Pa.

Forest Products Research Society's 7th annual meeting **June 15-17**, Memphis, Tenn.

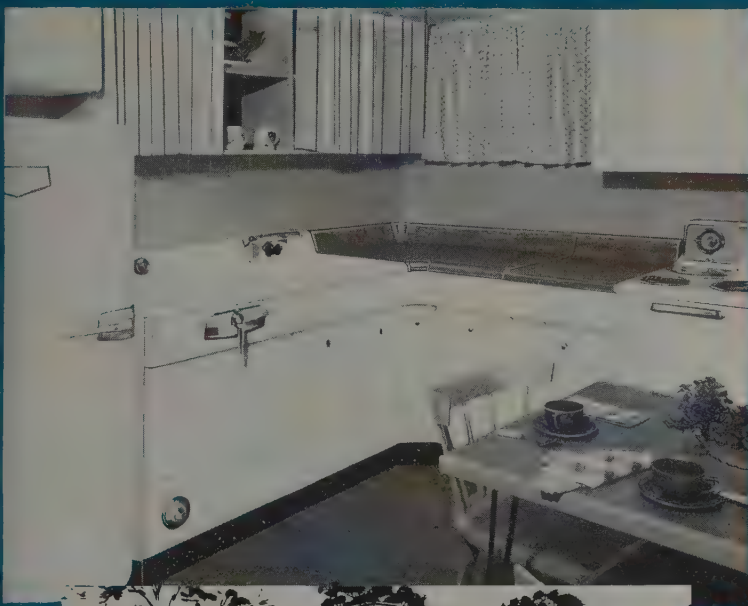
The American Institute of Architects' annual convention, **June 16-19**, Olympic Hotel, Seattle, Wash.

National Association of Real Estate Boards' annual convention **Nov. 8-14**, Statler and Biltmore Hotels, Los Angeles, Calif.

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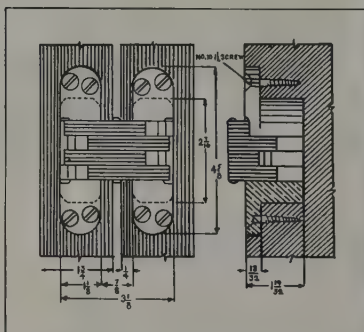
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BEHIND THE BLUEPRINTS



KAZUMI ADACHI, 39, is a native Californian born in Alameda and schooled at the University of Southern California. Adachi received his Bachelor of Architecture from USC in 1939, went to work for

Los Angeles Architects Spaulding, Rex, De Swarte. He then reversed Greeley's famous advice, migrated east in 1943, worked in New York for Hans Knoll and then for Ketchum, Gina & Sharp. He subsequently returned to the West Coast and rejoined the Spaulding firm. During this period, Adachi won first prize for the Southwest Region in the FORUM NAHB House Design Competition. He also worked for Pereira and Luckman before striking out on his own early in 1952. His office is in Beverly Hills, his practice primarily residential. He placed first in a recent design competition for the Fort Moore Pioneer Memorial in Los Angeles and is now preparing the working drawings. Associated with Adachi on the design of the Nishi House published this month, p. 128, were Architects Dike Nagano and Hideo Takayama. Nagano is 32, an alumnus of Yale and Harvard, and of the Spaulding and Ketchum offices. Takayama is currently associated with Marsh, Smith & Powell.



GARRETT ECKBO, 43, is one of a handful of US landscape architects working in the modern idiom. Born in Cooperstown, N. Y., Eckbo received a B.S. in Landscape Design from the University of

California in 1935, put in 14 months of practical work at a large Southern California nursery before coming to Harvard on a graduate fellowship. Immensely stimulated by the advanced thinking of Harvard's architectural faculty, Eckbo and several other *avant-garde* landscapers turned their graduate studies into thorough-going research to bring landscape theory and practice up to date with modern architecture. In Eckbo's words, the innovators "abandoned the old sham battle between formal axial and informal wiggly plan patterns and began to search for new forms evolving directly from their problems and the materials used in their solution." Eckbo earned his Master of Landscape Architecture in 1938, then worked in the East for six months before returning to California. Since 1945, Eckbo's headquarters have been Los Angeles while partners Robert Royston and Edward A. Williams have directed the firm's San Francisco offices. Both branches plan residential gardens large and small (e.g. the Adachi House, p. 128), do site and landscape planning for mass housing developments, schools, commercial and park projects.

continued on p. 98

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BEHIND THE BLUEPRINTS



WALLACE EDWARD JOHNSON, 50, was born in Mississippi, educated in its public schools, worked in Mississippi sawmills, was employed in a small Memphis retail lumber yard in 1938 when he

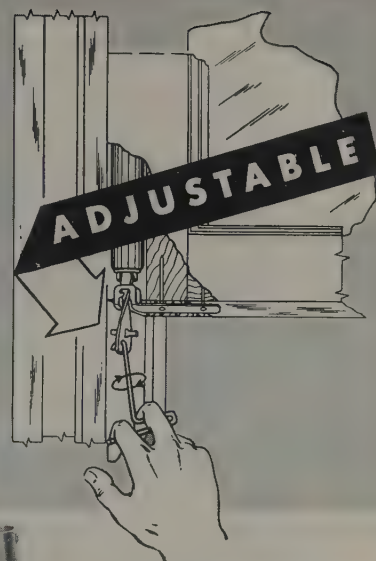
decided to start his own business. With his wife, Alma, as partner, he built \$3,000 houses. By 1950, Johnson's firm had mushroomed into an 800-employee builder-supplier-dealer organization with an average yearly production of 1,500 dwelling units and a \$1½ million payroll. In 1945, Johnson was instrumental in organizing the Memphis Chapter of the National Association of Home Builders, and served as the group's first president. He is currently engaged in another NAHB program, the Trade Secrets House, producing his own regional adaptation (p. 114) of the original design.



DAN KILEY is a landscape designer and architect in Charlotte, Vt. with a combined office and residence on Lake Champlain. His ménage he lists as wife, "7½ children, a goat, two sheep, 70 hens," and the combination of family and office he calls "a perfect solution for practising" (p. 150). Kiley is 40. Boston-born and a Harvard alumnus (two years at the Graduate School of Design). In the 1930's he worked for the National Park Service, the Public Buildings Administration and the USHA, and from 1940 to 1942 he was in private practice, doing landscape architecture and site planning. An engineer officer in World War II, Kiley won the Legion of Merit for designing the Nürnberg War Trials courtroom.



Builder **JOHN C. SARGENT JR.** is vice president and "idea man" of the Jayhawk Construction Co., founded 15 years ago by his father, John Sr. Policies and finance are the father's domain; fieldwork, involving liaison with construction superintendents, subcontractors and designer (James Cushing), is the son's. The company has built 900 houses, ranging in price from \$5,200 to \$50,000. The younger Sargent, 26, was born in Topeka, attended Washburn College in his home town for two years. He lives in the firm's 608 apartment project, which he manages, and plans to move shortly to a new three-bedroom house in his own fast-selling subdivision, Westview Heights Manor, published this month (p. 142).



SPIREX SPIRAL-SPRING SASH BALANCES

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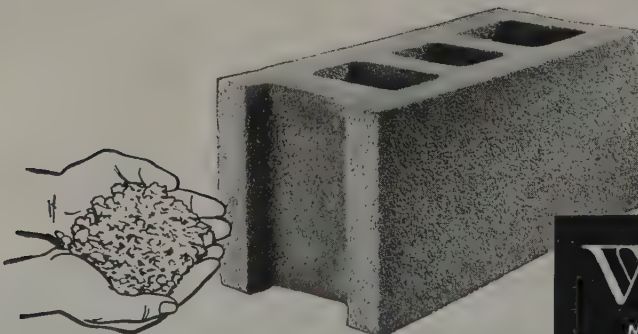


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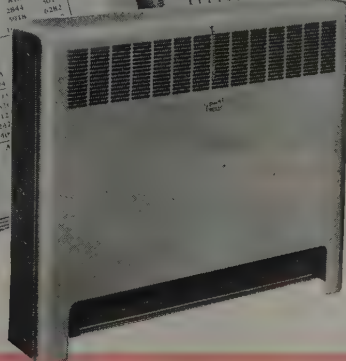
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Table 12	16	20	24	28	32
Cabinet Height (Inches)	14	16	18	20	22
Types "F", "R", "FR"	4	2.7	2.5	2.3	2.1
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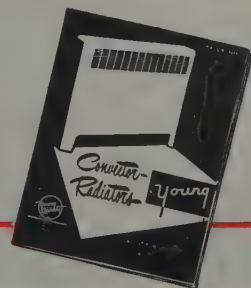
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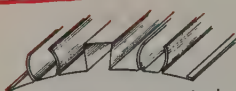
All of the frame homes in the nationally-known Park Forest, Illinois Community Development are equipped with Dura-seal Combination Metal Weatherstrip and Sash Balance. And this important visual feature helps these homes sell themselves!

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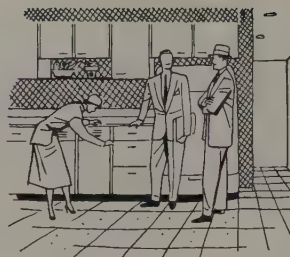


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Aerial view showing northeastern part of Park Forest, a project of American Community Builders, Inc. Philip M. Klutznick, president and Nathan Manilow, vice-president and treasurer.



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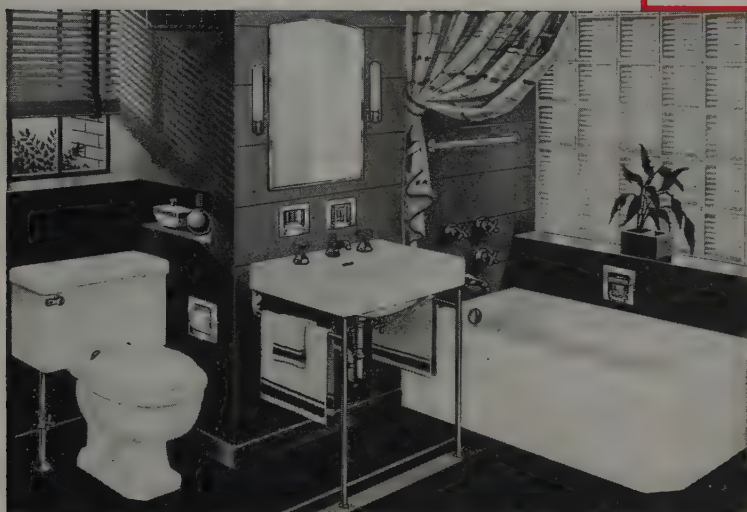
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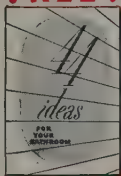
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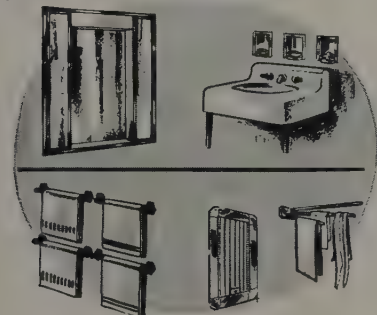
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MODERN MORTGAGES

A monthly report on important developments in the modernization of mortgage credit, with particular emphasis on the expanding potential of the package mortgage, the open-end mortgage and the expandable mortgage



*This month
Richard G. Hughes
discusses the benefits
of the open-end mortgage*

NAHB leaders give 100% backing to the open-end mortgage

By **Richard G. Hughes,**

first vice president of the National Association of Home Builders

Leaders of the National Association of Home Builders are 100% in back of the open-end mortgage plan and would like to see every mortgage written with an open-end clause. We believe this would be good for the home owner, good for the homebuilder, and good for the whole economy.

Good for the economy

An important segment of NAHB's over-all housing objective is to preserve and extend the life of the nation's housing inventory.

We have been greatly concerned at the lack of proper maintenance and repair of the nation's structurally sound housing. In rental units, much of this neglect can be attributed to rent control. In owner-occupied units the greatest part can properly be attributed to the fact that the owner does not have immediately available funds with which to do the necessary repairs and maintenance which he knows should be done.

The open-end mortgage would make the needed maintenance funds available to the owner and so contribute to the accomplishment of the objective: to preserve and extend the life of the US housing inventory.

Good for the home owner

Almost everybody knows the many advantages the open-end mortgage plan offers, the most important of which are these:

1. It would permit the home owner to get quick, low-cost credit at any time during the term of his mortgage for the proper maintenance and repair of his house.

2. It would allow him to expand his home—add an additional room (which may be necessitated by the addition of children), add a garage or fix a basement up as a recreation room.

3. It would permit him to add home comforts such as air conditioning, which is now available at reasonable prices for the low-cost house.

4. It would allow him to make all these improvements without overloading himself with short-term, high-rate credit—debts

that might impair his ability to meet his normal monthly bills and the payments on his original mortgage, and so might jeopardize the entire equity he has in his house.

Good for the builder

There are also many advantages in the open-end mortgage to the merchant builder.

The open-end mortgage provides sales appeal. The builder who sells a flexible mortgage at the same time he sells his house can point out to the home buyer that the open-end clause provides a ready means of getting additional financing any time he needs it. Such a mortgage should enable the merchant builder to make more sales.

Repeat business

In states where permissible, the open-end mortgage would enable the merchant builder to repeat business. Statistics indicate that approximately four million of the seven million homes built since World War II had only two bedrooms. A major portion of these two-bedroom houses were sold to young couples whose families are expanding rapidly. Thus, there is now a great need for the third and fourth bedrooms. If the merchant builder had originally provided the buyer with the proper type of open-end mortgage, he certainly should be able to sell that buyer on the idea of letting him add those additional rooms.

Promote the general prosperity

Proper use of the open-end mortgage could contribute a great deal to the general prosperity through air conditioning rehabilitation, expansion, modernization and improvement of homes, and thus make a very material contribution toward the maintenance of existing housing.



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"Beauty **is** as Beauty **does**"

The most beautiful garage door will not give satisfaction unless it opens and closes easily.

The "OVERHEAD DOOR" of stock or special design delights the home owner because of its quality construction, perfect counterbalance and expert installation. A gentle lift—and the door rolls up easily. A gentle pull—and the door rolls down to a weathertight closure.

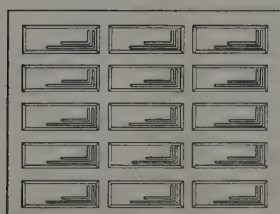
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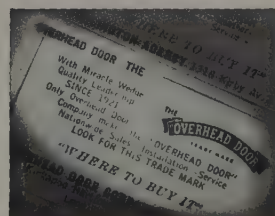
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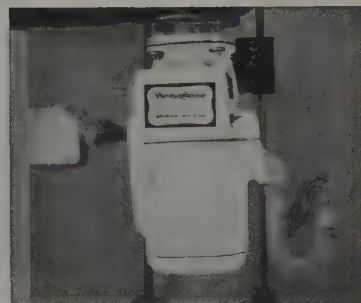
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FRANK LLOYD WRIGHT

and 1,000,000 houses a year

Museum of Modern Art



*Low-pitched roof, wide overhangs
FLLW's Robie house, 1909*



*Concrete block
Millard house, 1923*

Do you put floor-to-ceiling picture windows in your new houses? Do you sometimes line up all-glass doors to open on a terrace? If you do, you are borrowing an idea started by Frank Lloyd Wright in his Prairie Houses 50 years ago.

Do you give your roofs a lower pitch and wider overhang? If you do, you are following a trend Frank Lloyd Wright pioneered back when Teddy Roosevelt was in the White House.

Do you use the open plan, putting your dining area into an alcove instead of a separate room? That idea may well have started with Frank Lloyd Wright's Glasner house in 1905.

Are you beginning to leave the kitchen open to the living space too, so the maidless hostess will not be cut off from talking with her guests and family? If you are, you are taking up an idea Wright started in his Willey house in 1934.

Do you add carports to your houses? Wright invented the very name and regularly put carports on his "Usonian" houses 20 years ago.

Could you manage a good foundation without the cost of footings? Wright has been doing it so well and so long that now a top-flight homebuilder is financing a major research to make accredited tests for FHA.

Did you ever build a really fine house out of cement block? Before Wright got interested in cement block in 1923 it was used only for icehouses. When he got through he had made it a gentleman, for he demonstrated in the Millard house and many others that concrete block can be decorative as well as dignified. In these and many other ways Frank Lloyd Wright has made an intensely practical contribution to better housing for millions of families.

HOUSE & HOME is proud to show you another Wright house on the pages that follow. No longer does such a house look strange. Most people will agree that it is beautiful. Some of the practical contributions of this house are noted in the text, but no one can convey the real secret. Once when a famous builder mentioned to Wright how many tricks he had gratefully lifted from the master, Wright cut him short. Said he:

"That is not what matters in the end. What people want, what they desperately need in a house is some communication of the spirit, some quality of the soul. That is what they are hungry for today and what they too seldom get."

Such character can never be achieved by tabulating acceptance statistics or following the crowd. You know integrity, character, individuality in a house as you know it in a man when you meet him. What we give you here is a man.



THIS NEW HOUSE BY FRANK LLOYD WRIGHT

IS A RICH TEXTBOOK OF THE PRINCIPLES HE PIONEERED

LOCATION: Parkwyn Village, Kalamazoo, Mich.
MR. & MRS. ERIC V. BROWN, owners
DAVID CORNING, contractor

How much does the modern house owe Frank Lloyd Wright? In the text on the following eight pages, 25 design ideas are underlined. Every one appears in the photographs of this new Wright house. Every one is an idea that Wright first introduced many years ago and that has reappeared in his work ever since. And nearly every one is now common, in one form or another, in the average good house of today.

Almost two decades ago, Wright houses like this one gave architects and builders courage to try a fresh approach, to scrap the stereotypes and mannerisms of the day and venture something new in houses.

Wright, in the lead of the movement, contributed an almost incredible number of things to the house as we know it today. His art is even now an inexhaustible source of lessons that can be discovered and rediscovered . . .

First, because it is a vital art, an art of strength and originality, built of bold forms in powerful repose . . .

Second, because it is one of the arts of a free America, as Wright would put it — the strong, self-reliant, nature-loving America of Sandburg and Whitman, Emerson and Thoreau.

It is an art, however, that sometimes differs bluntly with other schools of

art. Where some modernists are intellectual and rational, Wright is a romanticist kindling deep and basic emotions. Where others erect an airy tent of colors that might be taken apart like a box kite, Wright builds a sheltering cave that neither wind nor time can budge. Where the interiors of some formalists are open yet static and rigid, Wright keeps his rooms open and dynamic, using a variety of lines, planes and textures that shift and change as one moves about. Where others have turned to fancy, Wright remains simple. Yet where others have grown cold, Wright is still warm.



Photos: © Ezra Stoller



WRIGHT HATES CARDBOARD BOXES.

He doesn't care whether it's yesterday's box or tomorrow's box—it's still a box. A glance at any of his houses shows how little he believes that a house equals four walls with a lid on top.

Wright builds freehand. First he organizes the ground into a modular grid (4' squares in this case; diamonds, hexagons or circles in others). His building blocks are usually great monoliths of masonry, which he arranges on the grid pattern he has prepared. With them he creates horizontality in the low-lying, heavy outside walls, and vertical counterpoints in the occasional upright mass of a wall pier, a chimney unit, a skylight

stack. The masses placed here and there suggest the rooms rather than compartmenting them, and glass fills in the outside gaps to keep out weather and let in light. Finally, he lowers the huge, sheltering planes of an oversize roof on his composition of solids and voids, pulling them together and uniting the whole to the lines of the land.

In the very first glimpse of this house one can see two trademarks of Wright's sculptural art: the masonry chunks and the sweeping roof, in this case lying so low it almost touches the hillside. The composition has been fitted into the landscape and has become part of it.

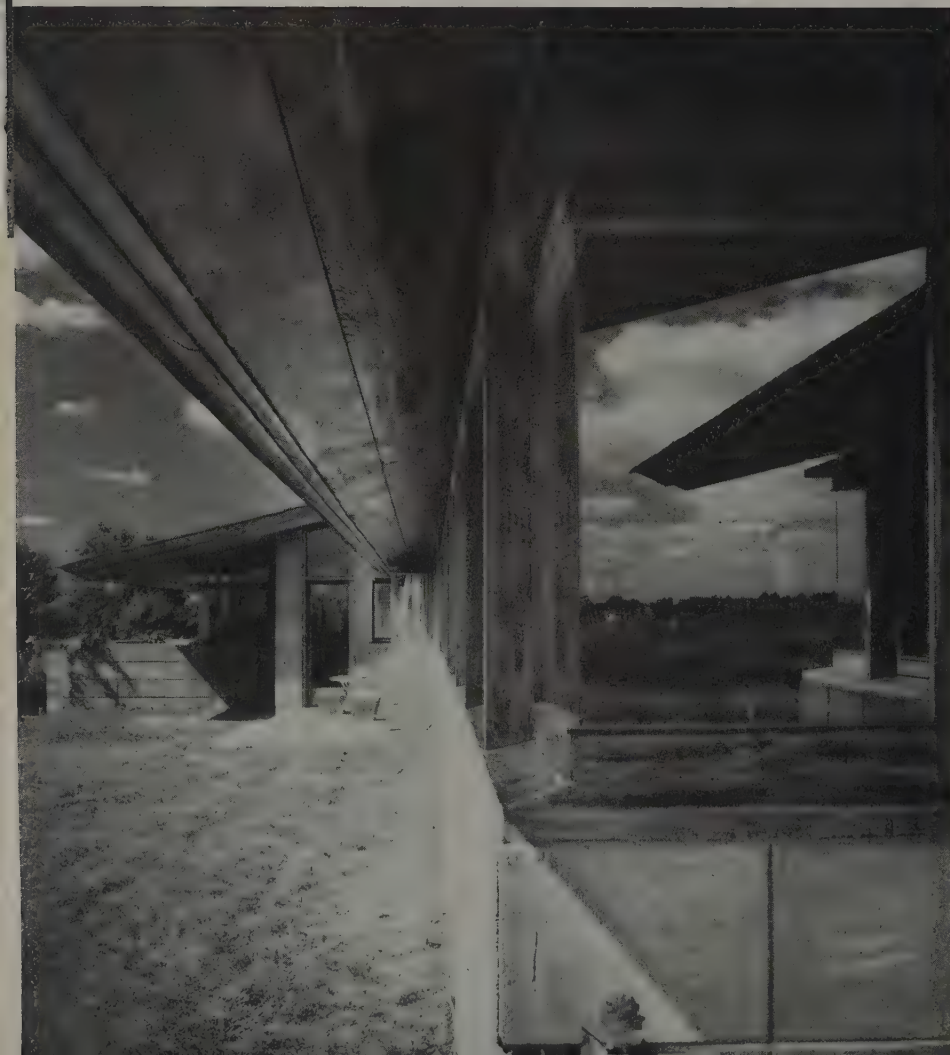
Inside this house the Wright principle can be seen wherever one looks: the liberation of space to space. Here

Wright the box-hater shows again how to free the interior with the open plan—one great room for living and dining, sometimes play and cooking activities as well. Here is one of the origins of the rear living room opening out to terrace and view through floor-to-ceiling glass panels now known as a window wall, and big swinging casements we call French doors (which, in turn, started the great American sport of indoor-outdoor living).

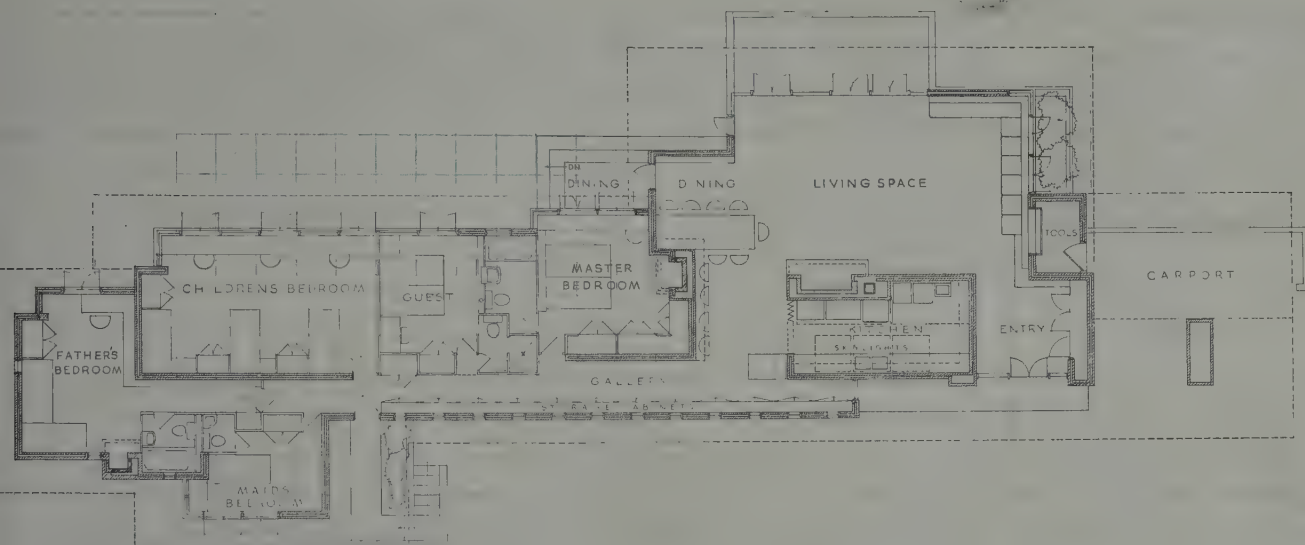
On the approach side of the house, Wright turned his back on the passing world and gave the house a closed front, maintaining privacy with a minimum of openings. Thus he made the house two-sided: one side open to nature, the other side closed to man.

LIVING ROOM has ceiling of wide mahogany boards and battens that slopes out over ceiling windows to shield interior from sun and sky glare. Glass door strip, left, keeps dining alcove light and open. Room is U-shaped, with entry (left), living and dining spaces wrapped around masonry mass of central kitchen and fireplace. Exposed floor slab is sealed and waxed.

CORNER WINDOW of children's bedroom and continuous strip window on side of house were early Wright innovations. So was the deep, sheltering overhang, which extends here over outdoor dining porch in background.



A GENEROUS, FREE-SPREADING WESTERN HOUSE ON THE USONIAN PLAN. ALL ROOMS FACE MAIN VIEW OF POND TO SOUTHWEST



LONG PLAN (130') includes later addition of rooms for maid and father-in-law. Nearly every inside corner is "destroyed" with glass or jogged wall surfaces. By product: good acoustics.





WINGED EAVES cantilever out on steel beams to overhang carport, left, and living room. The protective two-way pitch, quips Wright, is "for introverts"; his soaring roof "for extroverts."



WINTER-SUMMER fireplace has the familiar broad lines and suspended masonry hood, plus a new wrinkle: hearth is sunk 6", has a drain and faucet which trickles water down on plants and fish pond during summer months.

COMPACT WORK SPACE is provided by Wright inside kitchen, central but enclosed, running up through roof to get daylight and vent odors.



WRIGHT IS A CORNER-KILLER. Long ago he deplored the way people were cornered and suppressed by every right-angled junction of two inside walls or a wall and a ceiling. He realized that the vertical corners of a box do not have to be the structural bearing points, so he simply took the corners out. In their place he put two sheets of glass, mitered them together without a corner mullion, and supported the roof at points farther back along the outside walls. Thus the corner window was born — a detail that has often been manhandled as a superficial “sales feature” by those who didn’t understand its real purpose.

The next step was to eliminate horizontal corners, the solid right angles between walls and ceiling. Wright ripped off cornices and moldings, put

in glass right up to the eaves to make ceiling-high windows. He started using sloping ceilings to widen the angle beyond 90°, and open-beam ceilings, patterned wood ceilings and board-and-batten surfaces to give the eye big textures to play with. To offset the higher interiors and bring rooms back down to human scale, he added cove decks — cantilevered ledges around the walls that were an ideal place for him to introduce cove lighting.

The strip window is another Wright simplification that has been used, wittingly or unwittingly, by thousands of architects and builders (e.g. volume house builder Al La Pierre of Seattle, see H&H, Nov. '51, p. 200). A continuous wood frame incorporating several adjacent panels of glass, it can be pre-

assembled as one unit less expensively than separate windows, and set on top of a low masonry wall. Wright also brought the clerestory to houses and developed the skylight, both of which allowed him freedom to create and daylight his familiar interior kitchen and interior bath. He threw away, one by one, parts of the house he considered nonessential: the garage became the open carport; the basement turned into a simple floor slab with surface storage; radiators sticking out into a room were replaced by radiant heat pipes hidden in the slab; paint gave way to natural wood surfaces. In the effort to build everything in, such impediments as hanging and standing light fixtures, interior trim, gutters and downspouts gradually disappeared.

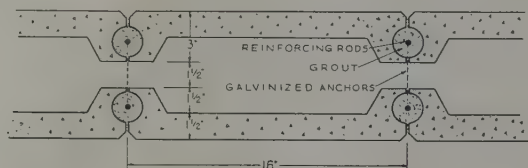




THERE IS MUCH TO LEARN, or relearn, from this new house and its old themes. But, as Wright has criticized his predecessors for imitating and his contemporaries for borrowing, he has warned those who would lift parts out of his houses for repetition elsewhere: "Instead of imitating 'effects,' search for the principle that made them original,

and own your own effects. An idea, once frozen into an effect, can be too easily transferred . . . architecture must be the spontaneous reaction of a creative mind to a specific problem, in the nature of materials."

Perhaps this is why Wright has sometimes been emulated, but never well copied.



MASTER BEDROOM



THE ERIC BROWN HOUSE is one of five Wright houses built in Parkwyn Village, a 50-acre semi-cooperative subdivision of 40 circular lots grouped cloverleaf fashion around a pond in the rolling meadows of southern Michigan. Wright executed the master site plan (a development of his famed "biscuit-cutter" layout) as well as the house plans and furniture designs.

Like the other four, the Brown house is built of two dominant materials inside and out: Honduras mahogany and smooth-faced concrete block. The blocks (12" x 16", 35 lb.) bevel-edged blocks were cast under pressure at a local foundry in special aluminum forms and laid up in a two-way grid of steel rods and liquid grout to make a cavity wall (see detail, left). Cost: \$500 for the forms, 35¢ each for the basic blocks, up to \$1.10 each for the seven types of odd blocks (corners, ends, electric outlets, etc.). The owners acted as contractors and part-time labor during construction of foundations and walls, retained General Contractor Cornish for the more complicated roof framing and wood-finish work.

WRIGHT'S TUNNEL GALLERY: A DRAMATIC 80' PERSPECTIVE ACCENTED BY NARROWING JOGS, HORIZONTAL TEXTURE LINE





The Trade Secrets house and the US builder

"I predict it will do more to influence future design for modern living in this area than anything that has happened in the past quarter century. People particularly loved the openness and roominess." Robert P. Gerholz, Flint, Mich.

"The Trade Secrets House has attracted the largest single-day crowd in the history of model home opening, and since then, traffic has been very heavy. Practically all the people who like modern design liked our house." Thomas Riskas, Phoenix, Ariz.

"We have thrown out all our plans for future houses and started over. From the Trade Secrets house we are working out a new basic house and variations. The public loved it." Barney McCool (Wallace E. Johnson, Inc.), Memphis, Tenn.



Laurence S. Williams



NAHB'S TRADE SECRETS HOUSE is now 60 days old. Here are the answers to the three big questions architects, builders, suppliers and lenders all over the country have been asking:

1. Do home buyers like it?

Answer: Indeed they do. The Trade Secrets house has aroused more enthusiasm in more cities than any builder house ever erected. In every city where the house has opened to the public (15 so far), record-breaking crowds poured through it. Huge crowds, long lines and traffic jams are now old stories; so is the almost unanimous approval. People especially liked:

Lightness and brightness. Floor-to-ceiling glass areas were not scorned as possible heat loss spots, but praised for the way they made the house seem bright and cheerful and the rooms larger.

Open kitchen. Somewhat surprisingly, almost universally the women liked the unconfined kitchen (except in the deep South, where servants are still available) and the idea of being part of the household while preparing meals.

Storage walls. Women were wildly enthusiastic about the 90 sq. ft. of storage walls (plus lavish kitchen cabinets and outside storage). Use of every interior partition to provide storage space minimized the usual complaints about slab construction (a strong indication that it is not the basement that people want, but the space it provides). Of the 176 builders who ordered plans of the house, only five requested the basement model.

Extra half-bath. Handy to entrance and kitchen, most liked it, but some would have preferred an extra shower included.

Low, long lines. The built-up, 3' in 12' pitched roof with marble topping and wide eaves was impressive as people approached the house.

Other features brought some criticism. Main objections:

Small bedrooms. Though storage walls obviated the need for much bedroom furniture, people still felt the rooms inadequate.

Window walls in bedrooms. Sliding glass doors were mentioned as "too much glass" in some areas, though patio off bedroom was not objectionable (a different type of opening might have overcome this).

Extreme simplicity of the front elevation. Oriented to the rear, the house appeared to some people drab and plain from the street side ("Looks like a barn," said one woman), but this feeling usually disappeared when they saw the living-room-patio area.

Carport. Mixed reactions greeted this, especially in areas where garages are common. Most asked if carport could be enclosed.

2. Can this house really be built for \$15,000?

Answer: Nobody actually knows, for nobody has put the house into quantity production, something the Trade Secrets committee intended to be a prime requisite. One builder, building in a fairly high-cost city in a cold climate, did sell the house for \$14,950, but he modified the original plan. (He included the lot, a refrigerator-freezer and washer-dryer in the sales price, and claims this should balance out the things omitted.) Most models were nearer \$20,000 and a few with especially expensive land and extra equipment (air conditioning, curtains, carpeting, etc.) ran as high as \$25,000.

"FHA granted us a maximum commitment before construction. After hearing the comments of the public visiting the house, FHA Commissioner Lyon agreed that 'there is no doubt that people really like it and that it is acceptable to them.'" Frank Zuzak, Shreveport, La.

"The adaptability to use of this house makes it a particularly attractive package to a lender. It could be easily modified to fit the needs of a specific buyer. Our sources would not be reluctant to accept this design." Alvy G. Schaum (v.p., Central Mortgage Co.), Philadelphia.

"We are especially pleased at the fine reaction of older people to the wide open planning. It confirms our belief that the liking for modern design is not confined to young couples. Our new houses will show the influence of this house." Wallace E. Arters, Media, Pa.

Any charge that the house was a failure, because it did not hit the cost goal set, has to be qualified by five significant factors:

a. It was built as a custom house, though the price was predicated on mass production. With only one house scheduled, no builder went to the expense of jigs for trusses and wall sections which would have saved money in a larger operation. Materials and equipment were purchased on a single-unit basis, the most expensive method.

b. Subcontracts were given, not bid for. In the frantic race to get the house ready for LIFE presentation, contracts were given to subs who could start "right now," rather than through a normal bargaining process. And suspicion of new methods led many to overestimate the time their crews would take, so they upped their bids.

c. Whole organizations were thrown into the job. Top-flight supervisors and key workmen were put on the house, with a resulting higher-than-normal overhead. In production, the cost of top personnel would be spread over many units. Overtime, even double time, was common.

d. Materials were often not available locally. One builder went 600 miles for exterior-grade plywood sheathing. Several sets of storage walls were trucked more than 1,500 mi. Marble chips for the roof were rarely found locally.

e. Costs of some components were underestimated. Three sliding glass doors were included when Californian Dave Slipper said his price was \$370 (this would have been only \$100 more than the same amount of window wall), but by the time the units got to Kansas City, freight and middlemen markup had doubled the cost. Redwood siding varied as much as \$200 per M, depending on locality.

One thing sure: The house cannot be built for \$15,000 by any builder who sticks to traditional methods and does not take advantage of the construction economies which were planned into the house, like tilt-up construction, with sheathing applied and windows set in on the jig; truss framing; putting in floors, ceiling and walls while the interior is still one big room (see "10 ways to save 10%," H&H, Jan. '53). The Trade Secrets house offers every builder a fine chance to check the efficiency of his buying and construction methods.

Open kitchen, below, with capacious cabinets, caught women's eyes, was No. 1 feature



Storage walls, entirely factory-finished, were put into place after ceilings and walls were painted. So many builders of the Trade Secrets house plan to include the units in their production models that one manufacturer is planning to increase his 1953 volume 500% over 1952.



Double sink and plenty of storage space were planned into bath. Half-bath adjoining was handy to entrance and work area of house. Some people asked for extra shower in half-bath.



Living area (below, seen from study) opens on patio. Size and shape of room makes different furniture groupings possible, and window wall floods entire area with light. Sliding glass doors, objected to in bedrooms (foot of page), were popular in this room.



Small bedrooms were criticized in almost every area. Few people realized that storage walls removed need for much bedroom furniture, could only visualize room crowded with usual pieces. Sliding glass doors in bedrooms were too average for most visitors.



3. What effect will it have on builders?

Answer: Every builder who built the house is making some changes in his 1953 plans. Some (principally in Texas) who were already using most of the principles are merely emphasizing features that the public especially liked (e.g. open planning). Others, like Tom Riskas in Phoenix, Ariz. and Wallace Arters in Lima, Pa., held up their 1953 houses so they could include the Trade Secrets methods and planning that seemed most applicable. Still others, like Bob Gerholz, in Flint, Mich. and Wallace Johnson, in Memphis, Tenn., completely scrapped their traditional design and operations, began retraining crews and foremen, planned large-scale production of contemporary models.

It is still too early to assay the effect of this house on the hundreds of builders who traveled from all over the US and Canada to see it. Most were impressed (176 sets of plans have been sold); a few were critical ("It's nice, but not the kind of a house you build to make money"). The big effect will come later this year when builders in a score of cities offer less luxurious, production versions of the house at \$10,000-\$14,000 (pp. 120 to 123). If sales are as good as some builders are betting, doubters will climb aboard in a hurry.

The house is still snowballing. Though only 15 houses are open now, 58 others are in some stage of construction. Builders' shows in five cities are featuring it. The spring building season will see many additional models for public and industry to appraise.

Landmark house. The Trade Secrets house has started a chain reaction that should bring drastic changes in merchant builder methods and design. Though the lessons are not new, this house demonstrates dramatically that they apply to all builders, large and small. The house seems assured of having a widespread effect on the industry for three important reasons:

It comes at a psychologically perfect time. Builders throughout the country are becoming uneasy about repeating the same old traditional house with surface changes. The most common question at NAHB's 1953 convention was: "How can I build a more salable house?" Success stories from those builders who broke out of the mold and introduced "radical" houses into conservative areas were impressive, but most builders still asked how much change the public would take. The Trade Secrets house should answer their question.

It proves the value of modern construction methods. The ease and rapidity of construction was an eye-opener to Trade Secrets builders. It's one thing to read about "one-room" assembly, but it's another to watch your own house go up in a fraction of the usual time with no expensive return trips by subcontractors.

It uncovers a hidden market for houses. People are no longer buying strictly from hunger, but when they are offered 1953 design they can still be sold if the price is right. In many consumers the Trade Secrets house rekindled a desire that had been extinguished by rows of Cape Codders and acres of ranch houses.

New models. Robert P. Gerholz, ex-president of NAHB, trying contemporary for the first time with the Trade Secrets house, says:

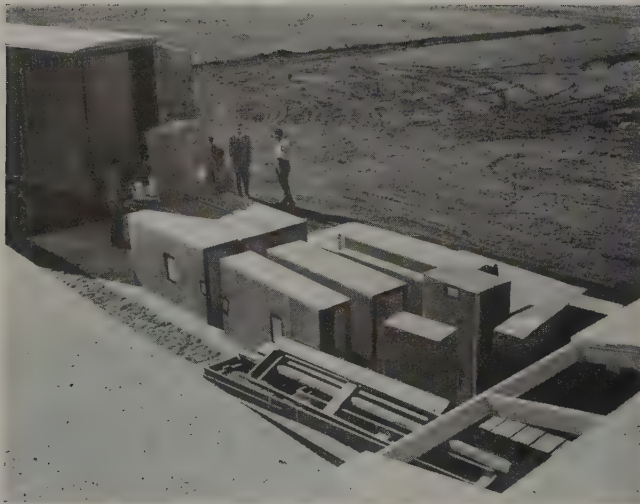
"In 1949, automakers found that when supply caught up with demand they had to retool completely, change the lines, add new features and new engineering. We builders are in the same boat today. The Trade Secrets house represents the newest tools we have in design, in methods, in engineering and planning. Now we must retool both our industry and our thinking if we are going to realize the full potential of the American family's desire to own a home of its own."

This retooling has already started. On the following pages you will see the effect this one house has had both on the public and on some of the men who built it. Demand for contemporary houses has been demonstrated. It is now up to the builders to supply that demand.

The "one-room" principle. In a famous vaudeville act, the characters, pantomiming building workmen, get in each other's way, walk into doors and create general pandemonium. Audiences roar at the slapstick. Builders, confronted with practically the same conditions on a job, don't laugh so loud—it costs too much money. Carpenters put in walls, and plumbers cut them apart. One man builds a series of closets, and another cuts and fits flooring around them. Workmen do part of a job, then have to stop while another operation takes over. Straight-line, uninterrupted production is almost unknown.

Yet this turmoil is unnecessary. The Trade Secrets house taught its builders that disorganization can be avoided. Walls (with window bucks installed) and trusses went up in one day, and the entire house was sheathed in. This gave one big room for all the other trades to work in (and a platform for the roofers). Heating units could be installed right after sheathing to combat any inclement weather. After rough wiring and plumbing were in, dry-wall crews were able to work from one end of the house to the other, without having to cut and fit big sheets around interior walls, and taping and priming followed. These men were then completely through, as all interior partitions were factory-made and finished. Flooring was put in the same way. After storage walls were in place, all that remained was finish plumbing and electrical fixtures, and a final coat of paint. No expensive and wasteful return trips were needed.

As a result, Trade Secrets builders found that their houses went up in an unbelievably short time. Wallace Johnson, who counted 90 days as average construction time for his conventional house, built this one in 13 days to catch the LIFE story, and says his production cycle will take 30 days instead of 90 from now on. Bob Gerholz built his house in one month despite the Michigan winter, and said: "It broke all records for this area." No builder took longer than five weeks, in spite of having to educate crews in the new methods as they went along. Builders, pondering the Trade Secrets house, could ask: "How much does every unnecessary construction day cost me?"



Interior walls for entire house are here unloaded from truck, need only to be unpacked and set in place. Only two builders job-built units, rest bought them factory-built. Long shipping distances from Texas factory added to costs, but centrally located plants are slated for Midwest and East.

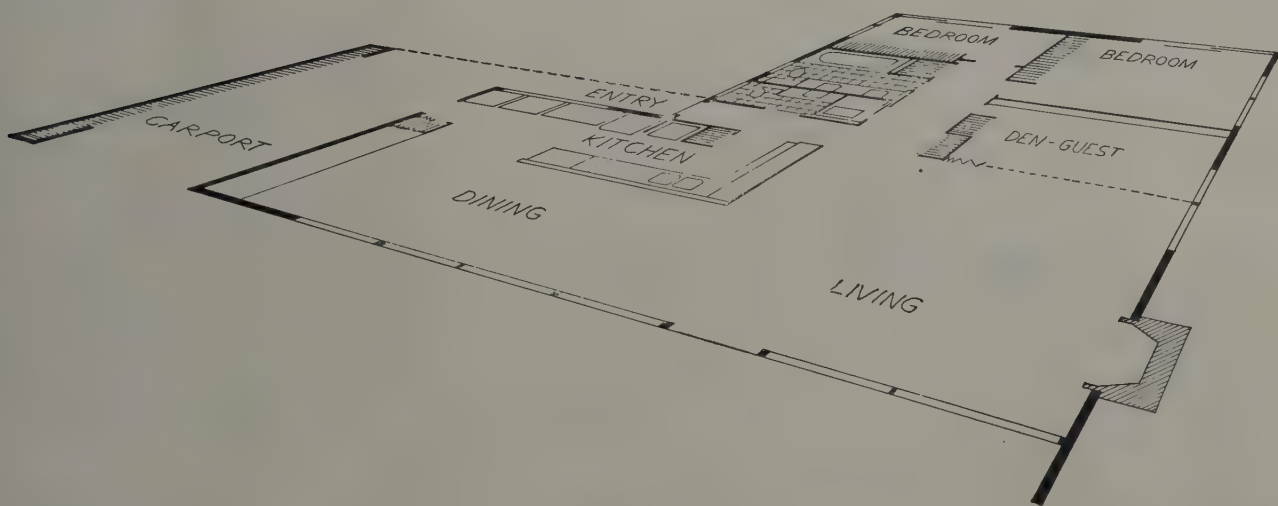
Finished dry wall, below, is in place before workmen start installing storage wall units. Complete door-frame units are included so that no interior stud construction is needed. House is completely walled in (note glass) so that heat can be installed to forestall delays due to cold weather.



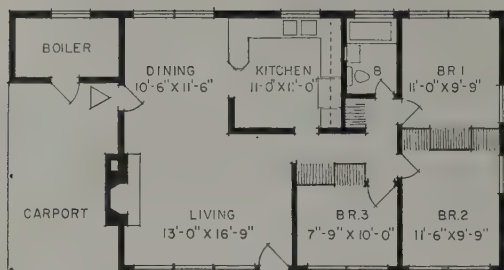


© Arnold Newman

One-room principle is illustrated by house just getting trusses installed. As soon as roof sheathing and glazing are complete, the entire interior will be free of any obstructions that might hinder workmen. Dry-wall and flooring operations can proceed from one end to the other.

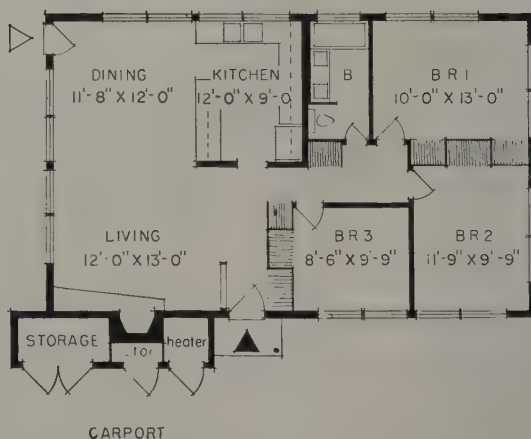


BEFORE Trade Secrets



LOCATION: Lima, Pa.
 GEORGE HAY, architect
 ARTERS BROS., INC., builder

AFTER Trade Secrets



Hold everything. In Pennsylvania, Builder Wallace E. Arters already had his 1953 plans on the drawing board when he built the Trade Secrets house. He had already scheduled a three-bedroom house on a slab, planned to include storage walls, more glass, a beamed ceiling and an open kitchen. Sales price: about \$13,000.

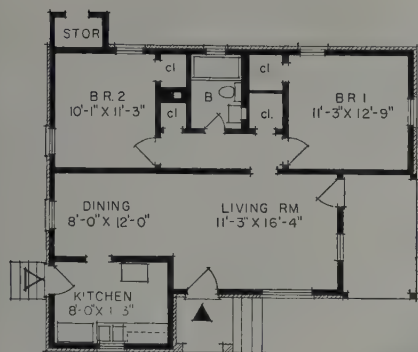
When he opened his Trade Secrets house (from which he learned a lot about construction methods), Arters and Architect George Hay took careful note of the public's reactions. The crowds showed such approval of the LIFE model that they decided to scrap the plan underway and do an entirely new version, with 19 brand-new features that their 1952 house hadn't had. While he was at it, Arters sold the NAHB house and three duplicates at \$21,500, including a full acre site.

Lower priced. Arters is using his version of the Trade Secrets house as his bid to increase his volume (50 houses in 1952) by hitting into the \$13,000-\$14,000 class in his 150-house Riddlewood subdivision. He describes the new plan (below, left) as "sort of a blend of original ideas, Trade Secrets, and Don Scholz of Toledo" (H&H, Jan. '53).

Tilt-up, modular design, dry wall and the one-room idea will be used, but roof trusses were passed up in favor of an open-beamed ceiling in the living areas of the house, which he feels has a strong customer appeal. An all-glass gable end will test the convictions of his Trade Secrets house viewers, who expressed their liking for the window wall.

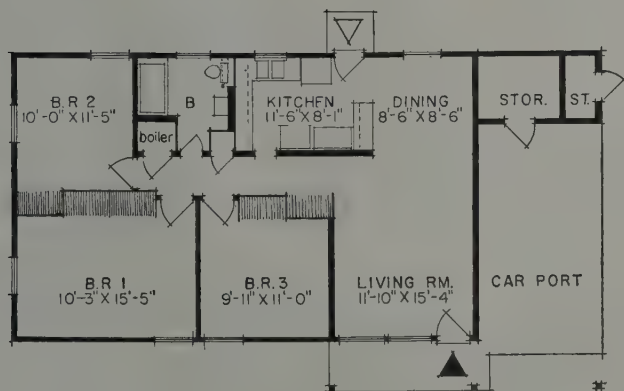
Costs are still being computed on the new model (provisional three sales have been made from the sketch), but Arters expects that he will be able to hold it in the same price range that he originally aimed for.

BEFORE Trade Secrets



LOCATION: Memphis, Tenn.
HALL & NORTON, architects
NED A. COLE, consulting architect
CHARLES E. WILLIAMS, designer
WALLACE E. JOHNSON, builder

AFTER Trade Secrets



The Wallace Johnson story. One of the most dramatic Trade Secrets effects was in Memphis, where the Johnson organization was already looking for a new house, having realized that "we have been building 1925 designs." Before their thinking crystallized, the Trade Secrets house appeared and Johnson decided to build it to sample public response and opinion.

Then came the avalanche! By accident, the house was announced as opening on Jan. 1, the same day Tennessee played in the Cotton Bowl. Johnson felt few people could be torn away from their radios and television sets, and only one salesman was assigned to the house. But by midmorning, there was the worst residential traffic jam that Memphis had ever seen. Best estimate of the day's crowd is 10,000. Four weeks later the throng hadn't slowed up much and traffic was so heavy that the house had to be redecorated.

Already convinced. Johnson's amazement had started long before, while the house was being built. With a normal schedule of 90 days for his conventional house, it seemed incredible that this house went together in 13 (with some overtime and extra work to catch the LIFE deadline). Crews who had never seen a truss or an open plan worked so efficiently that Johnson realized that all he had read and heard about new techniques was not just talk, but was applicable to any operation.

Little things added up to big savings. The wide overhangs let men put siding on even on rainy days. Less cutting and taping were required for his dry wall. Plumbers made only three trips, not four. In fact, every trade got in and out faster. Designer Charles Williams said: "It doesn't seem possible to get all the benefits you do from so few changes in design. But you don't have to cut and fit together in all the little places."

1953 model. Johnson, who hopes to build 3,000 houses this year, is revamping his entire procedure to utilize the one-room principle. This means trusses, tilt-up framing and \$1,500 worth of storage walls for his interior partitions. With approximately 1,050 sq. ft. of livable space, he plans his three-bedroom house for about \$12,000, with \$600 extra for the second-bath version. When he cuts his construction time by 66% he expects to save a lot of money all along the line. The house will not be a smaller version of the Trade Secrets house, but a completely new house, built with the same principles (see drawing).

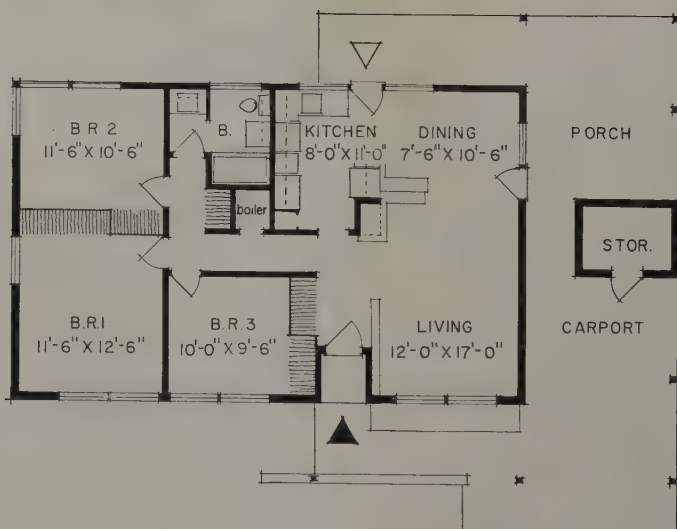
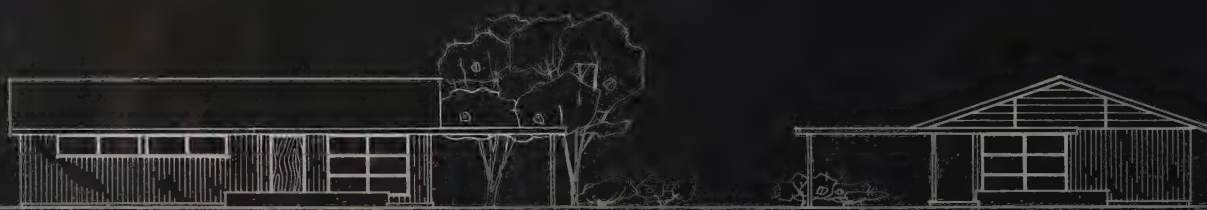
BEFORE Trade Secrets



LOCATION: Flint, Mich.
 J. L. KRETCHMAR, designer
 GERHOLZ COMMUNITY HOMES, builder



AFTER Trade Secrets



A conservative builds the house. The promotional possibilities of the Trade Secrets house originally attracted NAHB's ex-president, Robert P. Gerholz, but the public's response in Flint, Mich. convinced him that people would be even more eager to see the same features in a lower-priced house.

For years, the Gerholz product has been the two-bedroom bungalow, with expansion attic (sometimes finished), a house that is practically the trademark of the Midwest. Basements were a must, for other builders who had built slabs often skimped on storage space, and slabs were in disrepute.

"Building the Trade Secrets House was much more effective than arguments and magazine articles in illustrating the advantages of many techniques such as trussed roofs, storage walls, etc. Changes that probably would have taken some time to bring about are being put into practice immediately," says J. L. Kretchmar, Gerholz' designer.

Modern in Michigan. Gerholz' new 600-house Southgate project abandons attics and basements, along with the traditional elevations. He will use a trussed roof, lighter interior partitions, storage walls and an open floor plan. At the moment, he is still studying storage facilities and actual kitchen arrangements.

It is especially significant that a builder of Gerholz' stature should be so ardent about new methods and designs: his action will carry real weight with conservative builders. He is convinced of the value of complete planning and careful study before construction, so that problems are solved on the drawing board, rather than in the field. To that end, complete detailed plans of houses, locations, elevations and orientation are being prepared. The whole Gerholz organization feels that will give a big shove to the favorable public response to contemporary begun by the Trade Secrets house.

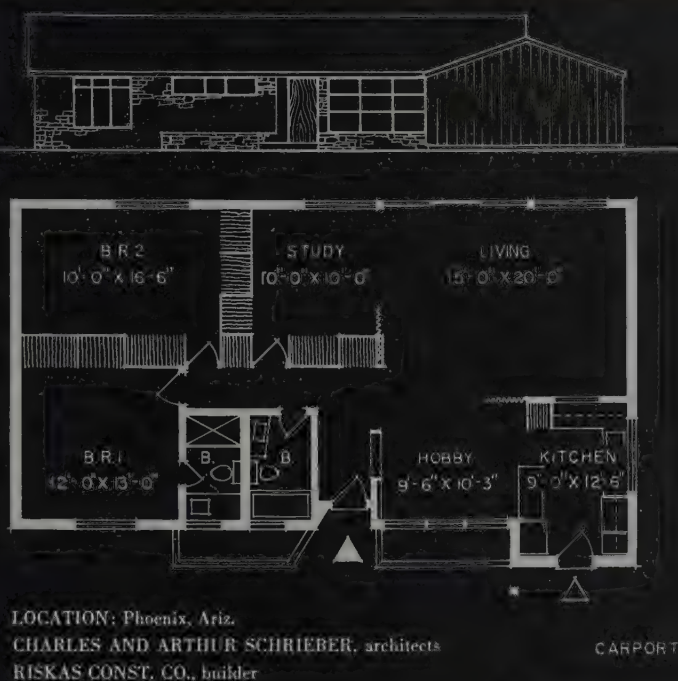


Revised plans. In Wichita, Ken Stowell, whose market is the \$20,000-and-up house, planned to add 4' to the bedroom wing, 2' on bedrooms and greater width to entrance hall and powder room. He also planned to eliminate the bedroom patio, and to add more utility area, separate from the kitchen. He said: "Almost every homebuilder in this area has been to see this house."

Andy Place, in South Bend, Ind., who was a member of the Trade Secrets committee, will close off the third bedroom and enlarge the others. More utility space will be added, and the carport will be made a garage. Still figuring costs, Place thinks his version of the house will sell for \$17,000-\$20,000.

One of the most ingenious variations turned up in Phoenix, Ariz., with Tom Riskas offering a 1,450 sq. ft. house (below, left) with two baths and refrigerant cooling for \$14,950. The hobby room is set off from living area by a folding door in a curved track. Riskas reports that "other builders all like some portion of the house, and ideas from Trade Secrets are appearing around town."

Air conditioning and a double carport made Frank Zuzak's Trade Secrets model cost \$20,300 in Shreveport, La., but the acceptance of the house by the public caused Zuzak to commission a new design in the \$12,000 bracket. The three-bedroom house (above, left) will have storage walls throughout, and a patio off the kitchen-dining area suitable for outdoor dining. Open kitchen had to be modified to accommodate preferences of Louisiana buyers.



One dissenting voice. The only negative vote came from Houston, Tex. where Miles Strickland said that people objected to the small bedrooms and the \$18,950 price. While he felt that the house would have little influence on the buying public, he admitted that it had drawn "larger crowds than any model house has previously in Houston."

One significant point: every builder who is going into a production version of the house dropped the L shape in favor of a cost-saving rectangle. Only one size truss is then needed, and the steel beam in the original house is eliminated. In addition, cutting the width of the house will make it fit average lots in subdivisions. (One of the price-raising factors in the models has been the fact that the house was usually put on an exceptional, and expensive, site.)

House with a porch in the middle

LOCATION: Lake Stevens, Wash.

BASSETTI & MORSE, architects

JOHN FISCHER, landscape designer and builder

This house revives and reverses an old idea: the veranda. Here, instead of encircling the house, Architects Bassetti & Morse have made the veranda an airy wedge right into the heart of their 1,700 sq. ft. house. It serves alternately as terrace, dining room and playroom, and forms the essential gusset* strip that keeps a small house from popping at the seams.

Social orientation

Like a skillful moderator, this pivotal area adds a sense of social ease to a tight situation. It is versatile, agreeable, undemanding and well-connected. After the entrance hall it is the first place where you pause coming indoors. From it you can go quickly to

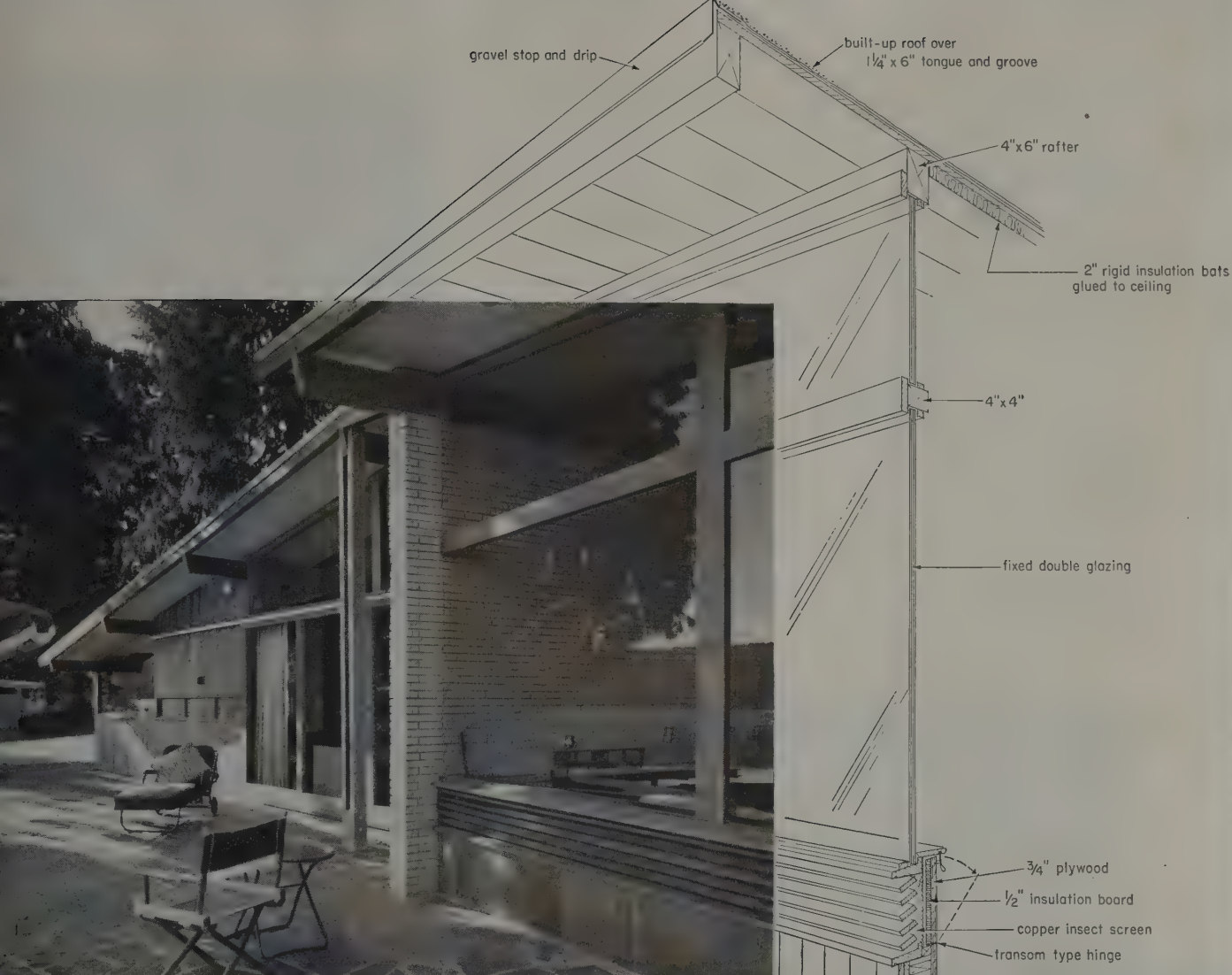
* A gusset, as every woman knows, is a triangular piece of material inserted in a garment to provide greater width and freedom of movement.

every corner of the house, but it has much to make you linger. On the south side, the intimate entrance garden is visible through a wall of glass. On the north, you look out to a wide terrace with Lake Stevens lapping at its edge. The 12' glass wall on this side may be pushed open to transform the room into a half-open lakeside pavilion in warm weather. But even on rainy days the airy height and wide clerestory windows tend to lift the gloom. East and west the space links up with the kitchen and living room, forming an expansion joint between them. During a party it makes a happy overflow area where guests can help themselves at the kitchen pass-counter (it's a perfect buffet) or stroll out on the terrace to watch the lake traffic. When the kitchen seems too small (the owner has a solid culinary reputation) this extra space accommodates cooling jelly glasses and holiday baking. Any day at all it's a relaxing spot for lunch, reading, etc. To reduce upkeep, the area is paved in stone (which also means you don't have to watch where you splash when you wash the window wall).

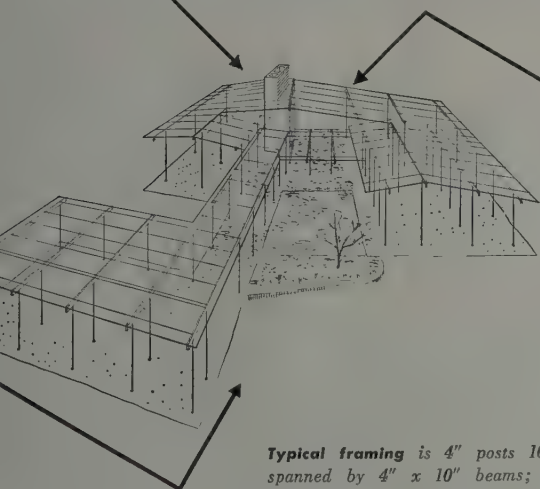
A wood canopy shelters path from carport to entry. This wing follows the angled boundary of the narrow lot

Photos: Dearborn-Massar





Wide-bay framing gives the house its airy character. The architects are the first to point out, however, that the structural expression possible with this system has not been consistently exploited here.



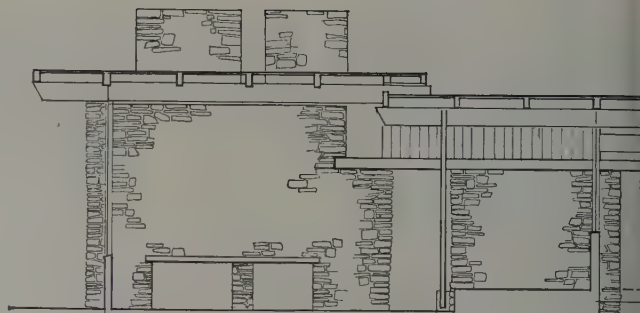
Typical framing is 4" posts 10' o.c. spanned by 4" x 10" beams; above them are 4" x 6" purlins 3'-6" o.c. and roof planking. Total cost: \$18,000.

A porch-dining room is on the centroidal axis of the plan. Internally it connects the two wings of the house; externally it links the two terraces. The lakeside wall, below, forms a 12' sliding door which can be opened wide on mild days.



Personal orientation

The house is especially well suited to the needs of its owner, a lady whose children and grandchildren live nearby and often visit her. She likes to cook for them and the kitchen-dining porch arrangement makes the undertaking pleasant for her in a number of ways. The low counter-partition lets her exchange gossip and dishes freely as she works (it also invites a helping hand). The waist-high fireplace in the dining room makes it possible to serve steaks hot off the coals. And at dinner she can make the room either an intimate one with the curtains drawn and light centering on the table, or an expansive space with lights across the lake extending the panorama. When her grandchildren come over to spend an afternoon, the indoor porch links with the terraces to become a playground that high spirits cannot harm. And from the kitchen she can keep an eye on the youngsters in all three areas.



SECTION A-A

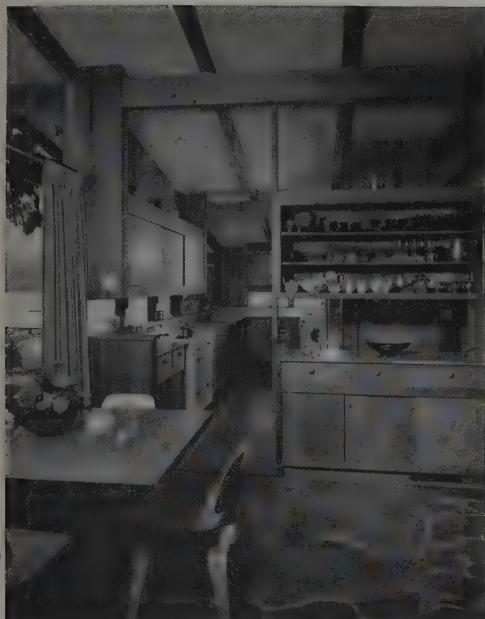
Pumice brick wall separates living room and study from rest of house. Recess to right of fireplace cuts through to dining room, is accessible to both rooms for stacking wood.

Photos: Dearborn-Massar



Wall of glass, 12' wide, can be pushed open to join the flagstoned indoor porch to a wide flagstoned terrace running toward the lake.





The open kitchen, left, is a handsome setting for an accomplished cook. In it, she is never out of the conversation; from it, she has a commanding view in three directions. Panels between roof beams are plastic insulation.

The dining room is like an airy pavilion which sweeps through the middle of the house bringing with it a sense of the wide out-of-doors. Horizontally space flows out to terraces north and south, vertically it swoops skyward through the clerestory, below, and a glass-filled gable end.



A house is as big as its lot

Six inexpensive outdoor "rooms," interlocked in a novel H-plan, double the effective size of this house at little extra cost.

Careful location of indoor rooms, walls and fences shows how to get privacy and outdoor living in the suburbs

In this house one wall of every room is not really on the house itself, but on the far side of an adjacent "pocket" garden. In effect, half of each room is indoors, half is outdoors. Between the two halves is only a glass partition or window. Repeated again and again, this design device yields a handful of little indoor-outdoor spaces that can make any house seem twice as spacious as it really is.

This is a big house, 2,800 sq. ft. It stands on a sizable lot, 100' x 175'. But its combination of privacy with outdoor views might work even better for a smaller house on a smaller lot. If the indoor rooms were too small, their outdoor areas would be doubly welcome. If the lot were too small, the outdoor walls might be still more important to privacy.

This is a private house, in the full sense; a place where the owners can have privacy from the busy street, privacy from neighbors, privacy from each other. Neighbors and passersby can enter it, either visually or physically, at only one point: the front door. At other points around the exterior they are not invited to participate in the owners' family life.

LOCATION: Los Angeles, Calif.

KAZUMI ADACHI, architect;

Dike Nagano, Hideo Takayama, associates

ECKBO, ROYSTON & WILLIAMS, landscape architects

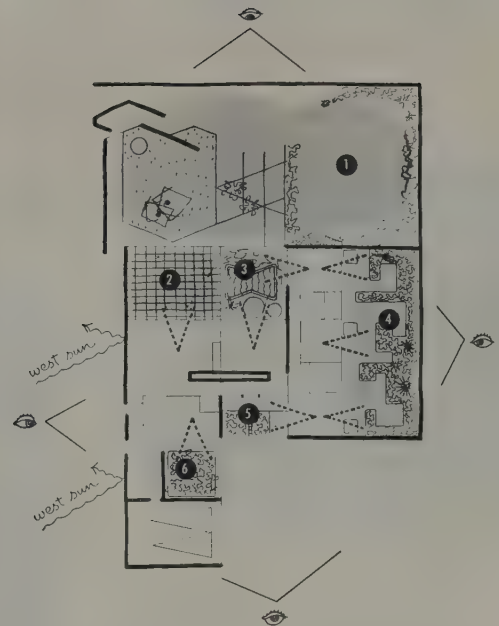
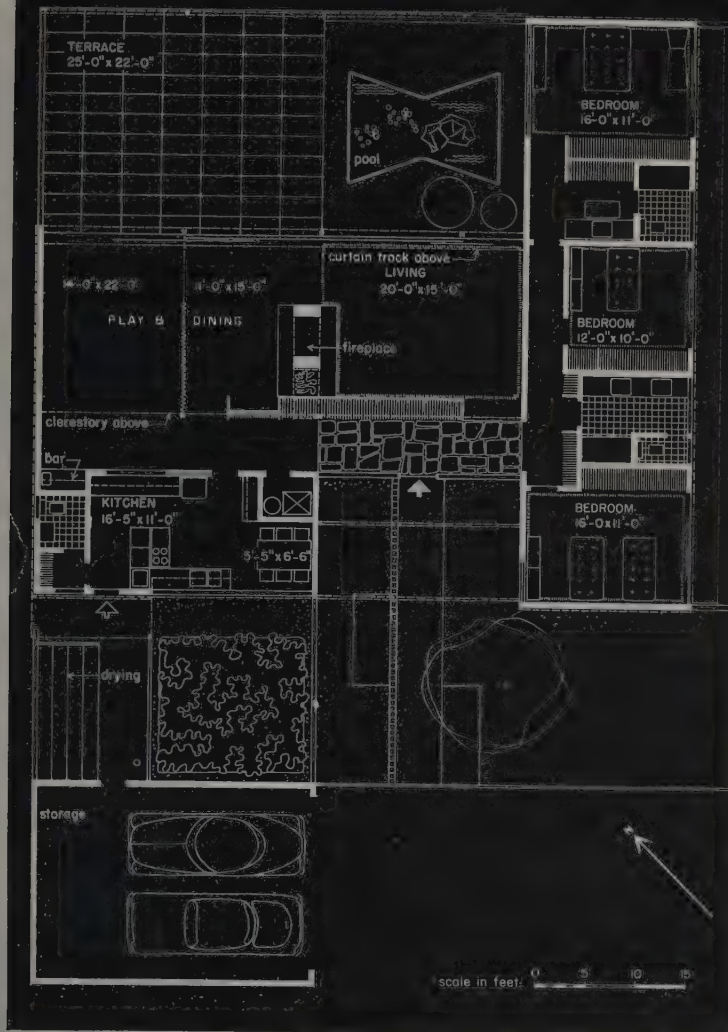
PARKER, ZENDER & ASSOCIATES, consulting engineers

RUSSELL ELAM, contractor

CARROLL SAGAR, decorator

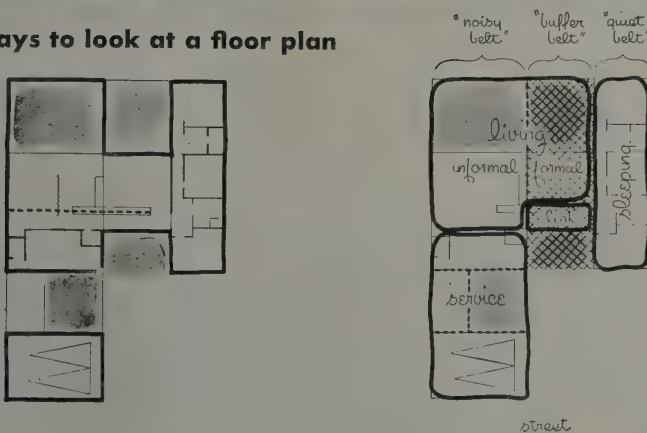
Photos: Julius Shulman





Controlled views, pocket gardens. In full plot plan, above, key solid walls and fences (accented in black) are strategically placed a) to give views within the lot boundaries, and b) to obstruct outside eyes. Every room in the house, bathrooms included, has a private view of one or more of the garden areas: 1) the main garden, 2) sitting terrace, 3) pool garden, 4) bedroom terrace, 5) entrance court, 6) kitchen garden. Yet, with blank walls and fences to terminate each vista, no one inside looks out into other windows of the house, or beyond to street or neighboring lots. Conversely, an observer on any side of the house cannot see in. Note: windowless walls to the west also shut out hot afternoon sun.

Four ways to look at a floor plan



Plan type. The house is roughly a 60' square with two courts let into its perimeter, making it essentially an H-plan. Because it is a compact, deep plan, a clerestory (dotted line) was used to give the deep space light and ventilation. Garage is detached and up front to give a kitchen-drying yard adjoining the laundry and of the kitchen. Garage turned not to open toward street.

Proper zoning. The three main types of activity—living, sleeping and service—are grouped in three well-defined zones. Putting the formal living room in the bridge of the H provides a useful gradation of activities within the living zone: the center section of the house (cross-hatched) contains all the formal, quiet areas which act as a buffer between sleeping, informal and noisy areas.

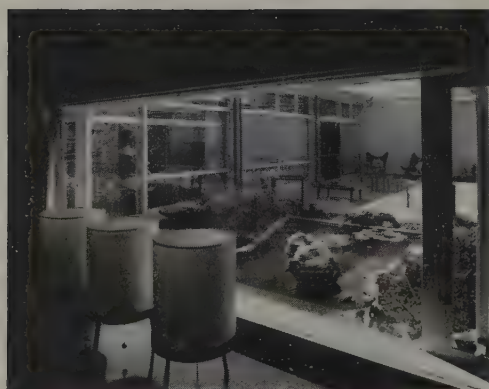
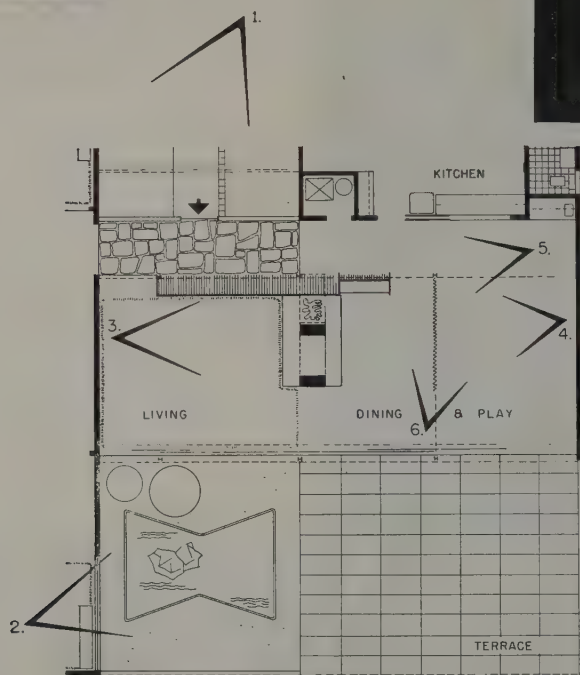
Good circulation. From a central entrance hall, there is immediate access to all rooms in house without going through any others. Traffic hugs one wall in nearly every room, stays in a quick, straight line and out of the way of furniture areas. Service entrance is close to street and hidden from main approach. Garage is convenient to kitchen, which has its own lavatory near back door.



1. Formal entrance provides a gradual transition from outdoor areas to closed interior. Front bedroom has blank wall to street.



3. Formal living space is a buffer between sleeping and noisy zones. High clerestory supplies light and cross-ventilation. Two-way fireplace is faced in travertine.



2. Master bedroom looks out to small formal garden and decorative pool. View is protected by high wall beyond living terrace.

This is a quiet, introspective house, one that quite literally looks in on itself instead of out at the rest of the world. Within its walls Architect Adachi has provided owner Nishi with an environment of inward, almost Oriental, composure.

On all four sides he has arranged windowless walls and patterned fences to exclude sights and sounds. Each indoor room looks out through glass to its corresponding outdoor "room," an intimate paved or planted area partially enclosed by fences and by an angle of the house itself. Kitchen and breakfast nook, for instance, look out not on the street or a neighbor's yard, but to a private flower garden defined by the back wall of the garage and two fences. Living and master bedrooms share another pocket garden and decorative pool; the front bedroom has its own "little view" of the planted entrance court, and so on for every room in the house. Each of these outdoor rooms, besides offering a controlled view, makes its indoor room seem just that much bigger.



4. Informal areas: play space in foreground can be closed off from dining area by curtain on suspended track.



5. Entry hall is separated from living area by freestanding storage wall of walnut. Terrazzo floors are easy to maintain.



6. Dining space can be near fireplace, or here next to kitchen pass-through. White doors at right conceal a built-in bar.

7. Living terrace, below, virtually an outdoor room, completes the H-plan. Steel framing of indoor living areas allows wide spans of glass.

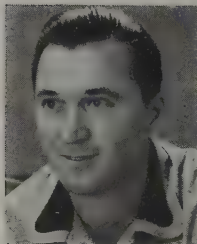


The Fickett formula: **good design works both ways**

Here is an architect who gets

\$100,000-plus a year

from merchant builders alone . . .



Edward H. Fickett, 36, is the son and grandson of native-born California builders. . . . During school summers he worked at various building jobs for his father and in the office of his father's friend, Sumner Spaulding, FAIA, who urged him to study architecture—which he did, at the University of Southern California, working part-time for Spaulding and other architects to widen his experience. He finished his formal training at the Art Center School, Los Angeles. After three war years with the Navy's Civil Engineering Corps, he formed a partnership with Francis J. Heusel, and established his own practice in 1947. Since 1948, 80% of his practice has been designing houses for merchant builders like Ray Hommes.

. . . and here is his biggest client,

a builder who was willing to pay

as much as \$20,000 to get

the best-selling house designs

in Los Angeles



Ray Hommes, 52, started building apartments and commercial structures in 1937, worked on government and military contracts during the war. He first employed Fickett in 1949 to help him solve a problem of slipping house sales, today is "completely sold on modern." He has built 2,000 Fickett houses plus Fickett apartments and commercial buildings in the past year. Says Hommes: "A clever architect working closely with a merchant builder makes an unbeatable combination. An architect with vision, ability and training can create something unique, functional and appealing, and through research add new ideas in materials and equipment. A builder who doesn't use an architect is out of date and won't be able to compete."



Julius Shulman



Fickett's builders show steady design improvement



One of early designs for Coronet Construction Co., North Hollywood

Six years ago Ed Fickett was just another young man with a T square, an agile pencil and an urge to go places in architecture.

Today he heads a ten-man office in the Beverly Hills section of Wilshire Blvd. and grosses over \$100,000 a year, almost all of it from a source that other architects had scratched off their lists as "impossible" long ago.

The market Fickett tapped was not an easy one: the big-time merchant builders who were having no trouble at all selling mile upon mediocre mile of conventional bungalows. Burgeoning postwar Los Angeles was so hungry for houses it asked only that they have roofs and a little plumbing. At that time phrases such as "open planning," "sales appeal" and "architect-designed" weren't a necessary part of a builder's working vocabulary. In the rush for quantity, the quality of moderate-income housing fell sadly behind Southern California's exciting new individual house and commercial architecture.

For an architect, the market Fickett tapped had the hidden potential of a Los Angeles oil field. But it required patience to drill through to it.

The discovery came partly by chance: a savings and loan president for whom Fickett had designed a commercial structure put him in touch with a builder whose house sales were beginning to slow down unaccountably. Fickett started drilling. He set about learning builder language, studying builder problems, adding to his formal architectural training a store of practical knowledge that had started with summer carpenter jobs for his father and grandfather.

In the past six years what he has learned has gone into *no less than 18,000 houses* for a dozen different builder clients, from whom he has derived both a comfortable living and the personal satisfaction of helping 18,000 families who thought they couldn't afford an architect. He has found that designing by the dozen is profitable—so profitable, in fact, that he has all but dropped the rest of his growing residential and commercial practice.*

At first his house designs involved "concessions": dolled-up, ranch-type "hybrids." But these transitional designs bridged the gap between where the builders stood, architecturally, and where Fickett wanted them to go. (See pictures, right.) No builder was anxious to be converted overnight to a member of an *avant-garde*, and possibly penniless, minority. In the case of Ray Hommes it took four years and a canny eye on the market to work up his enthusiasm through various intermediate Fickett plans to the level of design represented by the new Sherman Park houses. (It is interesting to note that, in the course of those four years with Fickett, Hommes has grown from an annual production volume of 200 houses to something like 2,000.)

Together in their latest tract, Sherman Park, Fickett and Hommes have set Southern California a new standard for volume-built housing, and competitors are vitally interested in how their formula works. (See builders' comments, p. 137).



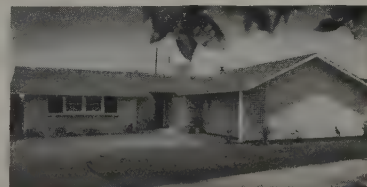
\$14,000 house in West Los Angeles tract; Spiros Ponty, builder



One of 900 houses for Johnson, Tyson & Lynds in Whittier, Calif.



Two models in an earlier "Sherman Park," Fickett and Hommes' first subdivision; 925 houses at \$6,950.



Last year's best: 160-house La Habra project for the Mac-Bright Co.

* The balance of Fickett's practice: occasional apartments, stores. The only custom jobs he has found time for recently have been residences for his successful builder clients—seven of them, ranging up to \$150,000 each.



"A" model (plan below) is Sherman Park's best seller at \$10,200. Note design of window surround, carport fence

LOCATION: Sherman Park, Reseda, Calif.

EDWARD H. FICKETT, AIA, architect

RAY HOMMES CO., builders

SHERMAN PARK DEVELOPMENT CO., owners; M. A. Smith, pres.

WILLIAM A. MANKER, color consultant

MARTHA WEAVER, decorator for Barker Bros., furnishings

VAN HERRICK'S, landscaping



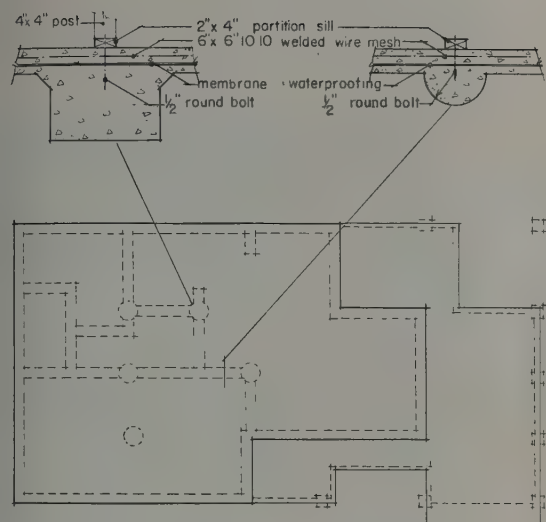
The Fickett-Hommes subdivision that is being watched most closely by competitors is Sherman Park, 1,000 houses now nearing completion in the San Fernando Valley (see photos). The first large-scale tract of all-out contemporary design in the Los Angeles area, it is underselling the market by \$1,000 a house, with delivery dates six months after sales. In spite of its considerable distance from central LA (25 miles), it is outselling conventional tracts nearer town, and roughly half its buyers are downtown commuters. When Sherman was started, a nearby tract of conventional houses of comparable size and price had sold 20 out of 200, within two months had sold 70. In two *weeks* Sherman Park sold out its first unit of 251 houses; the next 315 were not even advertised and as many as 33 were sold on a single week end.

Typical of remarks heard in Fickett's model houses: "great feeling of light and air inside, and no frilly moldings to clean. It's what we've been reading about in the magazines for so many years, but never could afford to buy." (Hommes promptly began plugging "Magazine Story Homes" in his ads.) Among the buyers have been some 20 architects and draftsmen, no small tribute to the soundness of the design.

Some professional observers feel, however, that Sherman Park buyers are younger and better educated than the average, and wonder how many houses like these can be built in the LA area before the market among this type of buyer will run out.

What NAHB says about Sherman Park

In a recent judging, NAHB conferred two Merit Awards on the Sherman Park tract. The citation for the 940 sq. ft. entry: "Well-designed for families with children . . . large amount of storage space and an excellent arrangement of porch and carports. Also commendable is the fact that the carport may be put to other uses easily." The 1,145 sq. ft. entry: "Good styling of porch . . . simple roofing system. There is too much traffic circulation through the living room, but this is offset by the fact that the bedrooms are well-separated from the living area." On the jury: Builders Leonard Frank, Earl Smith, Irvin Blietz; Architects Morgan Yost and Richard Bennett.



Foundations are designed to take the roof load down through 4" x 4" posts to circular pads or piers in center of plan. Nonbearing interior partitions rest on shallow, rounded slab beams.

Glass door separates indoor and outdoor dining in "A" plan



Space divider of cedar-chip board shields kitchen and breakfast bar

What sells the houses?

Homes attributes his fast sales to the contemporary design, the spacious feeling that open planning and high beam ceilings give the interiors, and the patio living and color styling.

Here are some of the lessons of the Sherman Park designs:

Keep it clean—low exterior lines and orderly elevations have appeal in themselves without adding "decorative" gadgetry.

Use one roof line, or two at most—not a dozen hips, gables and dormers—to unify the appearance of the whole house.

Show the roof—Fickett pitches his roofs just enough (1 in 12 to 2 in 12) so that the top, with its texture of gray-green crushed rock, can be seen.

Make the plan convenient—people like a separate entry, or at least an entry area; bedrooms and a kitchen that are easily accessible; inside bulk storage space; carport near kitchen.

Open the plan up—living, dining and kitchen space can be continuous and spacious-looking with minimum space dividers. Floor-to-ceiling glass walls can open up a rear living room to a back patio.

Keep the ceilings high—when the underside of the sloping roof deck is left exposed to become the "ceiling," the room height averages a couple of feet more than it would under a flat ceiling especially furred down. Big beams are a proved sales feature.

Use shadows—wide overhangs give a deep shadow line which accents the roof and breaks up the flat plane of the exterior. Fickett uses "shadow boxes" (protruding wood surrounds) to unify a pair of front windows and cast another shadow on the wall.

Use textures—staggered-board siding and fences outside, striated plank ceilings and textured cedar-chip board inside prevent a cold, flat look.

Use soft colors—earthy browns and greens, distinctive yet muted, have much more universal appeal than brighter colors, about which buyers are bound to disagree.

What kept the price down?

Fickett designed into the Sherman Park houses at least ten new and old cost-cutting techniques:

1. Rectangular plans—floor plans are simple rectangles, with entrances, porches, carports integrated to eliminate expensive corners, jigs and jogs.

2. Post-and-beam construction—a semimodular system of widely spaced 4" x 4" and 4" x 6" posts carries the entire roof load down to round concrete piers; shallow slab beams under interior walls save \$50 per house. (See details, p. 135.)

3. Slab floor—instead of a more expensive wood floor on joists. Greater moisture protection was achieved by pouring the slab in two layers with a membrane of emulsified asphalt between.

4. Deck roof—4" x 6" and 4" x 8" ceiling beams, topped with 2" x 6" T&G decking, 1/2" fiberboard and built-up roofing instead of joists and plastered ceiling. Ripping the underside of each 2" x 6" with five grooves gave a decorative ceiling pattern that also conceals defects in the cheaper, lower-grade lumber used.

5. Carports—instead of garages, saved \$50 a house (clear saving over the added cost of a 40-70 sq. ft. inside storage room to replace the usual garage storage).

6. Less trim—by using extruded metal corner beads in special wood-frame details around doors and windows, \$25 was saved in labor required to trim out each house, and a cleaner appearance was achieved. (See detail, p. 138.)

7. Dry wall—4' x 12' sheets of plasterboard, well joined, have done away with the plaster troubles of drying time, thickness variations, curing time between coats and interior cleanup. Plasterboard is a relatively new technique for Los Angeles.

8. Asphalt tile finish floors—Fickett and color consultant Manker felt the colors and patterns of stock asphalt tile were unacceptable. By working with tile manufacturers, they obtained a special clear-colored gray-green tile, at "C" quality tile prices, that looks as good as more expensive floor coverings. They believe this is even cheaper than leaving the slab exposed and trying to get a smooth finish and satisfactory color in it.

9. Lower windows—adjustable glass jalousies imported from Australia cost the same as standard sash, are sales feature.

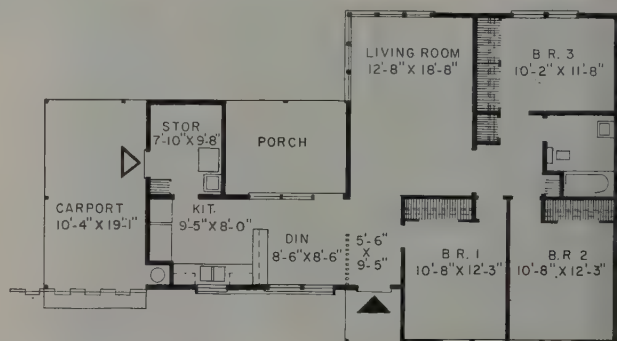
10. Chipboard—an unusual, deep-textured wallboard of pressed cedar chips is effective and popular in the living room and costs only 20¢ per sq. ft.



Living room, seen from dining space, has one wall of cedar-chip board, big crossbeams exposed.



"D" model is most popular three-bedroom house at \$11,400.



Dining area: adjustable lower windows shed rain; lower screen hides entry





Note: rear corner living room, enclosed dining porch and traffic pattern. See plan opposite

Photos: Julius Shulman & G. de Gennaro

What Los Angeles says about Sherman Park

Paul Burkhardt, NAHB treasurer: "As a result of the interest aroused in the Fickett houses at the recent NAHB convention, I went out to look at the tract; I had to park two blocks away. Sherman Park is something for Fickett and Hommes to be proud of; they have mighty good ideas, including the way they avoided monotony in the entire tract. I'd like to try something like Sherman Park one of these days."

Dave Slipper, of the Fritz Burns organization, builders: "The Fickett-Hommes success in Sherman Park gives us heart to speed up our own contemporary styling. What they are doing is confirmation that, if you go contemporary, go all the way! It is a forward step and deserves looking into by builders, although not too many have had to face it yet."

Biltmore Homes, builders: "Fickett did a very good job. Certain features of contemporary design will be incorporated from now on; all the houses coming off the drafting boards will have a new look inside and out, just like the new cars."

Milt Brock, past president of NAHB: "Most builders will be conservative, considering the financing problem, among others. But we need those builders who are willing to take a chance on contemporary."

Robert Cran, editor and publisher, Associated Architectural Publications: "Fickett has opened a new field for architects here. Hitherto, most architects have waited for the builder of medium-priced tracts to come to them. Fickett approached the builder, and sold him on putting up a tract of really contemporary homes. He has been articulate in transferring good design to the mass home; somebody had to get into the building field in Southern California and bring it up to date—and he did it. The Sherman Park houses have attracted public attention, including national awards; and since the public itself likes the Fickett-Hommes product, it disturbs other builders because they know they'll have to get going and cater to the desires of the market."



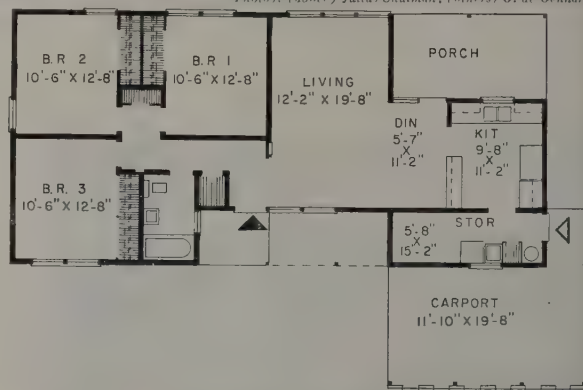
"F" model, another 1,145 sq. ft., \$11,400 house, gets design unity from single sweeping roof line, single wood surround framing front windows. Deep shadow lines, instead of applied decoration, give stucco wall visual interest. Plan has a weaker circulation pattern than other types.





"E" plan, 1,131 sq. ft. has large formal entrance porch, up-front carport shielded by staggered-board fence. Note front-to-back living room, dining porch near the kitchen.

Photos: (above) Julius Shulman; (others) G. de Gennaro



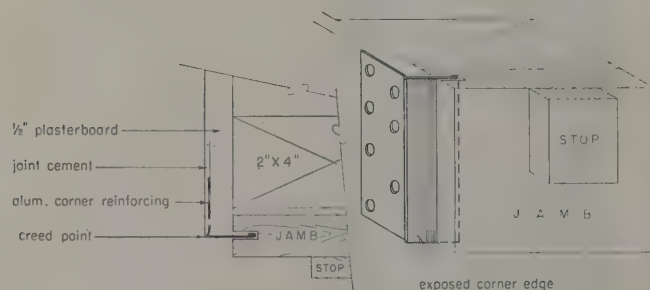
Free-form rug leaves traffic path bare between living, dining



The architect's role

On retainer, Architect Fickett provides the services listed opposite. He stresses to builder prospects that he is selling individually tailored professional services, *not* selling house plans out of a file drawer. But cut-rate plan services and unlicensed designers, working for less than \$25 per house, are numerous in Los Angeles. As a result, only one builder out of ten who walks into Fickett's office walks out with a contract; most of them still think in terms of \$10-per-house royalties and talking won't change their ideas.

Yet, for the past three years, enough builders have agreed with Fickett's formula to pay in a yearly gross of \$100,000. He believes "great strides have been made in the past four years. It's just something that can't be pushed."



Corner beads of extruded aluminum, fitted into specially milled sections around doors and windows, eliminated much interior trim. System gives plasterboard clean corners.

Hommes sales techniques recently won him a national award for merchandising. "The furnished models always sell the fastest," he says. "If one model is going slowly, we simply furnish it and then it sells." Landscaping helps, too. All four Sherman Park display houses are attractively planted, and in four new models for Meadowlark Park nearby, Hommes has gone all the way, retaining Landscape Architects Eckbo, Royston & Williams to produce full landscaping front and back, with fencing, paved areas, sandboxes, shrubs and trees.

Hommes, understandably, is enthusiastic about contemporary designs, wouldn't go back to his older Cape Cod, Colonial and Spanish houses, which he likens to "old-fashioned autos." His newspaper advertising reflects this, capitalizes on contemporary. Ad No. 1 (picture of young girl struggling with Grandma's corset): "Out of date and pinched for room"; ad No. 2 (young girl buttoning 1920 shoes): "High-button shoes had their day—but that was yesterday." Other catch lines: "For young people, and people with young ideas"; "Why own a Model T when you can own a model '53?"; and "If you have young ideas you'll take off that celluloid collar, sell your horse and buggy and buy a home that's designed for today's living."

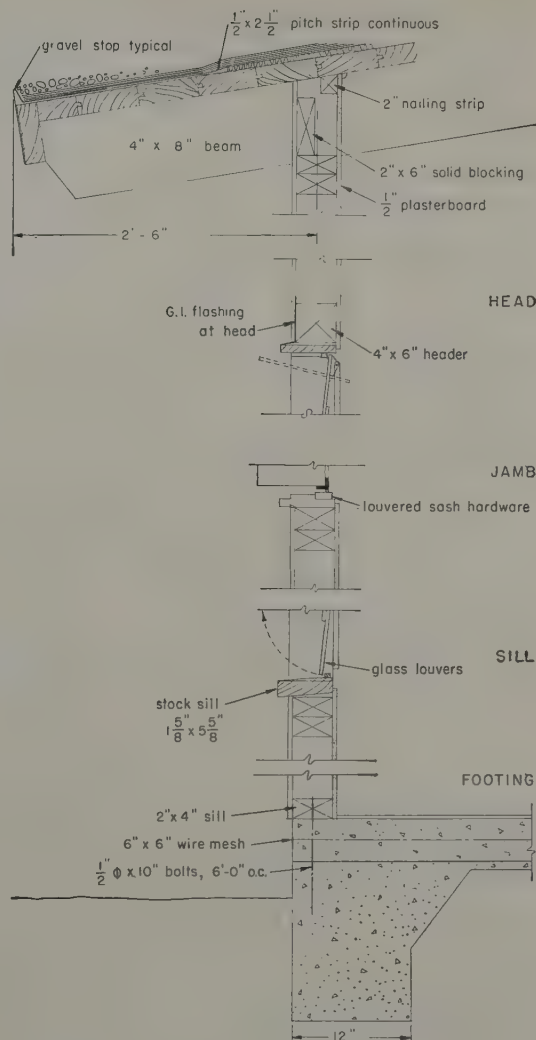
Nine steps to a better house:

- 1. Site planning**—Fickett supplies drawings for typical plots (and any odd-shaped plots) which show relation of house to lot: setbacks, sidewalks, utilities, trees, general orientation.
- 2. Preliminary FHA and VA approval**—Fickett "runs interference" for his builders by taking preliminary schemes to FHA and VA for approval, then making changes recommended by them and by the builder.
- 3. Subcontractors' conference**—at an early stage, the electrical and plumbing subcontractor, the mill superintendent and the carpentry foreman are called in for a conference in the architect's office to collaborate on the planning, and to suggest changes.
- 4. Full working drawings**—a complete set for each house-type just like those for custom or commercial work. Typical examples: for a 50-house tract with three basic floor plans Fickett supplied 20 full-sized blueprint sheets plus a master site plan; on a proposed 1,000 houses in the \$14,000 bracket now under construction with eight basic plans, he delivered 60 sheets of working drawings, including foundation plans, two-and-one-half exterior variations per plan, all detailing, and a master site plan.
- 5. Submission of drawings to agencies**—Fickett is available to help interpret the drawings to the building department, FHA, VA, and the lending institution, to fight for and obtain variances from the code, incorporate required changes. Fickett also fills out FHA and VA Description of Materials forms for his builders.
- 6. Partial supervision**—Fickett pays from 10 to 25 visits to the site, depending on the size of the job, to acquaint construction crews with his designs, follow the first four or five houses (usually the four or five different display models) to completion.
- 7. Color coordination**—Fickett sells as part of his service, or recommends for separate contract, the services of a color stylist at roughly \$10 per house.

continued on p. 172



Post-and-beam construction of interior is reflected in porch and carport. House colors by William Manker are earthy browns, greens and yellows on exteriors and interiors.



Eisenhower finally picks new boss for HHFA: former Rep. Albert Cole

For Albert MacDonald Cole, the biggest day of 1953 fell on Wednesday, Feb. 25.

His only son, Will, 20, was inducted into the Army at Camp Crowder, Mo. His daughter, Mrs. Mary Kaul, who works at the Library of Congress to help put her husband, Kenneth, through George Washington Law School, celebrated her 23rd birthday. And Cole himself was nominated by President Eisenhower as HHFA administrator to succeed Raymond Michael Foley, who has headed the nation's top housing agency since it was created in 1947.

The nomination came as no surprise to either Cole or the building industry. Cole, an articulate country lawyer from Holton, Kan. had been a patronage staffer for the Republican National Committee since losing his bid for re-election to Congress last fall. For over a month, insiders had known Al Cole was front runner in a field of some nine contenders, willing and unwilling, for the \$17,500 job. Yet the delay in his appointment, in no small way, epitomized the new administration's wary approach to US housing problems. How would an industry of such diverse and often conflicting interests react? NAHB, back in mid-January, had put itself on record as applauding. Realtors, who had come to look upon Al Cole during his four terms in the House (1945-52) as a champion of their viewpoint, hardly needed to say a word (and didn't). Mortgage bankers had no audible objections, particularly after Cole flew to Denver for a long talk with Eisenhower's old friend, Mortgage Banker Aksel Nielsen, whom he had not previously met. Then there was the FBI clearance, which took 10 days.

Anti-public houser. That left the thorniest question of all: Cole's congressional record as a foe of public housing—a program which would become one of his major responsibilities as HHFA chief. As a member of the House banking committee (where he helped shape much of the housing law he will now administer), and on the floor of the lower chamber, Cole consistently voted against public housing. So Ikemen not only cleared the appointment with Kansas senators but with Sen. Irving Ives (R, N.Y.), a pro-public houser who is chairman of the Senate subcommittee on housing and rent control.

While Ives apparently approved, most of the nation's public housers were quick to howl. The loudest cry came from the

CIO housing committee. Chairman James G. Thimmes, who is vice president of the CIO Steelworkers, wired President Eisenhower that Cole's appointment would be "ridiculous and harmful." At the Senate banking committee hearing on confirming the new HHFA boss, opposition senators questioned him sharply on his fitness to run a program he did not believe in. But even his opponents conceded Cole would win confirmation, although perhaps not unanimously.

Too much temptation. As is his habit, Al Cole explains his opposition to public housing with refreshing forthrightness: "It can—I don't say that it has—but it can become a vehicle through which power-hungry bureaucrats can take from citizens their rights. That temptation is too great for any political party. We must stimulate local communities to meet the need for welfare housing themselves. Who should provide the subsidy—federal, state or local governments? I've no objection to all three if it is outside the framework of federal control."

As Cole sees it, another fundamental objection to public housing is that it "discriminates" in favor of the lucky few who can get in, while doing nothing for the thousands of more eligible low-income families who thus pay taxes to support a favored class.

But Cole draws a sharp line between his opinion of public housing and his future course of action supervising it. Says he: "I believe I can honestly administer a program though some phases of it may not be acceptable to me personally. I am not going to scuttle public housing by indirect means. An

IN THIS MONTH'S NEWS:

(see pp. 37 through 49)

The mortgage money shortage grows worse and worse as the government delays a decision on hiking frozen VA and FHA interest rates

Practically everybody gets into the debate on housing policy, but no action is likely before sometime next year

Code unification, voluntary style, gets a big boost as the US Chamber of Commerce votes \$20,000 to speed studies

After four years of struggle against red tape, Baltimore gets a pace-making FHA commitment for urban redevelopment

Congress begins a fresh series of housing investigations, but the focus is on official errors instead of industry shortcomings

TIME: John Zimmerman



Albert M. Cole

administrator should follow the will of Congress. There is no question that a job needs to be done to get more housing to more people in low-income groups."

Study, not meat ax. Cole would take office at a time when most of the private building industry thinks federal housing machinery and policies need a major overhaul. A sizeable segment thinks HHFA itself ought to be abolished, again liberating FHA, PHA and the Home Loan Bank Board as independent agencies. Cole does not rule out killing HHFA, but as he told the Senate Committee, he was under White House orders to make a thorough study of the entire housing operation first. Moreover, he had instructions to "approach the problem with an open mind." Says Cole: "I'm not going in with a broadsword or scythe to start slashing. I'm going in to study, look and get advice. No changes will be made without careful consideration of the effectiveness of the program or of the people involved. It would be a great mistake to turn everything upside down."

For the long haul, Cole says he has some specific ideas about principal HHFA activities like urban redevelopment, housing research and stimulating faster progress in housing through FHA. But so far, he is confining his comments to broad terms.

► On the Title I redevelopment program which many a mortgage lender and builder complains has been slowed by red tape and sluggish administration: "The stimulation of communities can be much greater. I believe municipalities have a stronger sense of social responsibility than they get credit for. It hasn't been utilized, aided. There have been too many criteria. It's a crime we've permitted these things to lag. I'm looking forward to an expanded program."

► On research: "Statistics about housing are of prime importance. But in studying the entire HHFA program, research is going to be subject to careful scrutiny."

► On the oft-heard complaint of architects that FHA stifles contemporary design, new methods: "I'm no crusader, but I'm very much interested in modern development. There's an atmosphere in which you either encourage it or you don't. I'm against a man in an agency deciding what people want. If you really keep an open mind, you'll accept new ideas within the limit of keeping your feet on the ground."

Personnel & interest rates. For a few months, the new HHFA administrator will have plenty of immediate problems. Cole knows, for instance, that a decision on whether to raise the FHA interest rate should be made soon (see p. 41). That first order of business, he told senators,

must be coordinated with the entire government economic program. But he hoped a decision would be forthcoming "in maybe a month." On March 23, when the House ways and means committee is scheduled to begin hearings on the Independent Offices Appropriation Bill, Cole may well have to recommend how many public housing units be built in fiscal 1953-54. And he must decide whether to keep or replace the men in policy-making jobs under him in HHFA and its constituent agencies. All Cole is say-

Cole the man—an able country lawyer

While the views of HHFA nominee Albert Cole on housing and building problems have been emphasized by his votes in Congress, they have been shaped by long acquaintance. As a lawyer, Cole for 13 years represented the Holton (Kan.) Savings and Loan Association. "Cole believes in private ownership of homes and that they should be made as widely available as possible," says W. L. Hamilton, president of Topeka's City Home Savings & Loan Association from which Cole recently resigned as a director. "He has a good fundamental knowledge of the problems of the home owner and of the need for rentals for an increasing transient population."

Cole's father, a Baptist minister in Topeka where young Al grew up, built a four-bedroom house "all by himself" there in 1915 to shelter his family of four. Al Cole was then 14, having been born Oct. 13, 1901 in Moberly, Mo. and well remembers helping drive nails. Two years after he worked his way through Topeka's Washburn College as a bookstore clerk and through a law course at the University of Chicago by waiting on tables, Al Cole married Emily Corbin of Kansas City, daughter of a subdivider and builder of low-priced bungalows—about 100 a year.

At politics, a beaver. In 1925, Al Cole began 20 years of country law practice at Holton, a countyseat farm trading center (pop. now 2,705) 35 miles north of Topeka. There he veered into politics. Why still puzzles some of his friends. Recalled Topeka Banker Harold Rolley last month: "I've often told him he could do better for himself in other fields." Cole soon got himself elected county attorney, then city attorney, attorney for and member (12 years) of the Holton board of education, and (in 1941) a Kansas state senator.

He won his seat in Congress in 1944 after upsetting veteran Rep. W. P. Lamertson in the GOP primary. In their slightly battered Chevrolet, Emily and Al Cole put on an exhausting door-to-door cam-

ing is: "People in policy-making positions should agree with the top administration." But well-informed building men predict he will oust almost all of Ray Foley's chief aides. One possible exception: FHA Commissioner Walter Greene, whose retention is being urged by some builders.

* Mentioned so far in industry circles as prospective FHA Commissioners: Lumberman Norman Mason of North Chelmsford, Mass.; Newton Farr, Chicago realtor and former NAREB president; Mortgage Banker Don Hedlund of Seattle.

paign. While Cole spoke to the Holton Kiwanis Club, his wife was talking with cooks in a café where she ate alone. While he canvassed business districts, she combed residential areas. The Coles followed that pattern until last fall, when they neglected their own district to work much of the time for Eisenhower elsewhere. But the chief reason for Cole's defeat (by 73-year-old farmer-lawyer Howard S. Miller), was his outspoken views on two major local issues. Cole supported the Tuttle Creek Dam, part of Missouri River development plans. Many residents of his district opposed it because it would require abandonment of their farms. Cole's vote to remove a tax on oleomargarine was unpopular with large dairying counties in his district.

At golf, a duffer. At 51, medium-sized (5' 7", 160 lbs.) Al Cole looks and acts like a man considerably younger. He has a notably nonreceding hairline, not a gray hair among the reddish-brown, and an almost-boyish smile. The secret, perhaps, is relaxation. Al and Emily Cole lead a quiet life in a one-bedroom Georgetown apartment, having sold their old three-bedroom house in Holton to cut expenses. Cole often reads in the evenings—biography, historical novels, history and whodunits. When Mrs. Cole goes sailing on the Potomac in her 11' penguin class boat, landlubber Cole usually repairs to a golf course where he says "I work hard at breaking 100."

One Cole trait is sure to make a hit with Congress: he speaks briefly and pointedly. Another should help him weather the critical tempests that seem to swirl around almost anybody who holds the nation's No. 1 housing job: Cole has a philosopher's unconcern over brickbats. As President Hamilton of the Topeka City Home Savings & Loan says: "In the critical situations in campaigning, he was calmer than any of his advisers. Attacks he accepted as part of the game. I've never known him to display a vindictive attitude."



Wolfe's

Four-bedroom house looks impressive with its 61' width spread across 90' lot

Look what's selling fast in Kansas

Four-bedroom, two-bath houses at less than \$10 a sq. ft.

turn a sales tide for a Kansas builder,

and offer a housing solution to the multichild family.

Public acceptance of new design converts FHA and mortgage lenders

LOCATION: Topeka, Kan.

JAYHAWK CONSTRUCTION CO., INC., builders

JAMES C. CUSHING, architect

When a builder finds a soggy market for his houses, what steps should he take? Here's how young (26) Jack Sargent, vice president of his family's building firm in Topeka, Kan., reversed a declining demand:

- ▶ Decided his two-bedroom, 708 sq. ft. house was the bottleneck—and scrapped it.
- ▶ Visited progressive builders in other cities to study new methods and ideas he could use to give more house for the money.
- ▶ Hired an architect with merchant-building know-how, and with him worked out a big house with two full baths.
- ▶ Learned assembly-line techniques and parlayed them into a square-foot sales cost of \$10, as against his previous \$13.27.

Young man with a problem

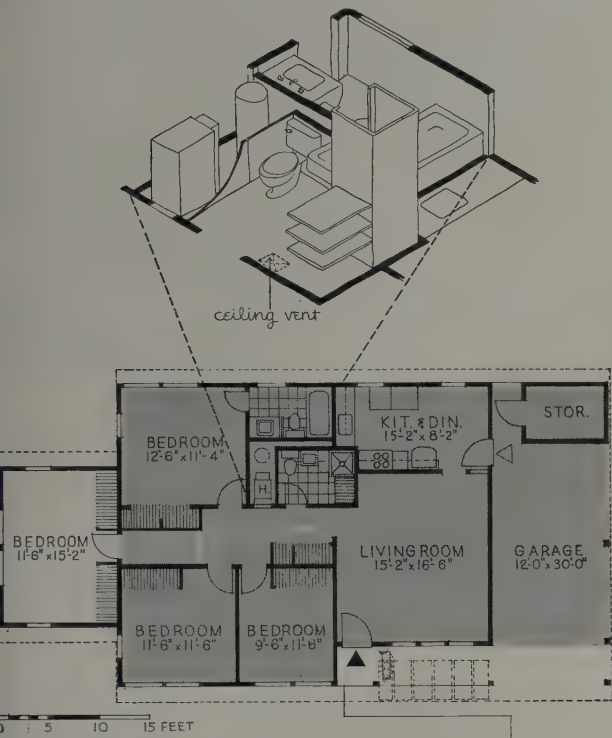
When the last 25 houses in his 183-house 1951-52 program met with heavy buyer resistance, Sargent decided that he needed not sales promotion, but a new house. Ideas for that house came from suc-

cessful builders throughout the Midwest who volunteered their proved short cuts and methods to Sargent as a Trade Secrets gesture. Andy Place suggested that he consider the fourth bedroom and the extra bath (H&H, Jan. '52), and gave experienced advice on perimeter heated slabs. In Denver, Sargent learned from Lou Carey's production techniques (Dec. '51 issue). From Texas came low roof lines and high windows. From two years with the Topeka FHA office came Architect Jim Cushing, anxious to demonstrate the dollars-and-cents value of design for the merchant builder.

Behind the wooden curtain

Two model houses (one three-bedroom and one four) were built behind an 8' plywood fence which encircled the sites. Public curiosity mounted and it became necessary to protect the fence from overeager Topekans who wanted a preview. The fence came down the night before the opening and the next morning's rush caused a traffic jam. A steady stream of people went through the houses and 70 sales were recorded in ten days. This record was doubly significant in view of the previous slow house market. Most common buyer reaction: "We've been waiting a long time to buy a house like this."

Second bath was made possible by FHA approval of inside bath. Plumbing wall puts all bath and kitchen fixtures on single stack, cuts cost of second bath to \$300. Heater room is accessible through removable plywood panel in bath. Living areas are protected from bathroom noises by 4" of mineral wool insulation installed between studs.



Sales lagged on small 1951-52 model

Customers were offered extras at fixed prices. Sampling below shows percentage willing to pay more for specific items.

Garages (\$300)	20%
Fireplace (\$700)	4%
Garbage disposer (\$97.50)	80%
Kitchen exhaust fan (\$49.50)	70%
Extra cork tile (\$150)	7%
Disappearing stair (\$87.50)	6%
Range outlet (\$25)	65%

Just what the customer ordered

Four factors built customer enthusiasm:

- 1. Space.** The three-bedroom model (\$11,375) has 1,078 sq. ft. of living area, the four-bedroom house (\$12,675) 1,270 sq. ft. Outside storage and carport bring the total square foot under roof to 1,480 and 1,672 respectively, which better the original cost goal of \$10 a sq. ft. And each house is set on an ample, Kansas-sized (70' or 80' wide) lot. (The need for more bedrooms was proved when Sargent sold all his 32 four-bedroom units in three days.)
- 2. Two baths.** In Kansas, as in many areas, the second bath is rarely found in a less than \$20,000 house. Because FHA approved an artificially lighted and ventilated inside bath, Cushing was able to squeeze out his second bath for only \$300.
- 3. Design.** The new long, low lines and large window area caught the eyes of young families, and caused Banker Henry H. Bubb (Sargent's mortgagee) to comment: "We feel this design will revolutionize house building in this area, and will certainly affect the price of houses already constructed."
- 4. Ventilation.** In Kansas, where summer temperatures often reach 110°, an oversized (3' dia.) attic fan was a hit. Continuous 4" soffit openings supplement gable-end louvers as exhaust vents.

Building in jig time

Sargent builds all of his wall framing sections in 15 different jigs, mounting windows at the same time. Sheathing is not put on until the walls are up because he found the rigidity of plywood made even slightly off-dimension sections too hard to join. Essentially, both houses have the same floor plan, with the hallway to the fourth bedroom replacing an oversized dressing room in the smaller house plan, so interior walls are alike for every house.

Doubting Thomases

FHA, suspicious of the unfamiliar lines, high windows, perimeter warm-air heated slab, and what looked like a too-low price, would at first guarantee mortgages only on the first 25 houses of the project, and gave conditional commitments on the remaining 118. There were other doubters, too. Some competing builders scoffed at the price set, and predicted bankruptcy. Jack's father, John Sr., head of the firm, questioned whether their customers were ready for such advanced design.

Ninety-eight house sales later, the picture has changed. FHA has committed the entire project, and last month raised the loan guarantee \$500 on the four-bedroom model (to \$10,100). And Architect Cushing is being besieged with jobs from the builders who, a year ago, could see no reason for an architect's services.

Not satisfied yet

Neither builder nor architect feel that they want to stand pat on this year's model. They are already planning changes, want to drop the roof to a 3' in 12' pitch and open up the planning, are thinking of using storage walls. Dining space, insufficient in this plan, will be added and the present traffic pattern restudied. Sargent's mortgage source assures him that more advanced design and features will be no drawback to lending, because "sales of this house have been excellent, while other sales in Topeka have fallen off."

Shape of things to come

Jack Sargent typifies a rapidly growing segment of the building industry. Often the second generation in the business, this group wants to break out of the mold that their fathers set. They want to experiment with new methods and new designs. They give and borrow ideas freely. They are trying to build better looking, better living, houses. They read, they travel, they ask questions. Each year their houses are likely to be better than the year before.

ADVICE TO THE APPRAISER

This is the third in a series of articles which began in the April, '52, issue of HOUSE & HOME. Their purpose is to supplement the FHA Underwriting Manual, the professional bible of FHA appraisers.

It has been obvious for some time that this manual is neither adequate nor up-to-date in discussing the design qualities of a typical contemporary house, whether built by a merchant builder for sale or by an individual family for its own use. In our first article, entitled "The Banana Split," we therefore discussed the use of different materials on a house facade; the second article, "The Horizontal Look," (July, '52) described several devices that can make a small house appear considerably larger and a dumpy house considerably more elegant.

In the following article the editors of HOUSE & HOME take you in through the front door to discuss what it is that makes a plan for a small, one-story house good.

THE PLAN'S THE THING

. . . or how to live at home and like it

Few things are as difficult for laymen to understand as the plans of houses. Unless he sees a completely furnished model house, *and can visualize how that house will function when in actual use*, the average home buyer hasn't the remotest idea whether he is looking at a real design for good living, or whether this highly advertised ranch (on a 60' lot) is going to send his loved ones packing after their first two weeks of domestic bliss.

Nor is the layman alone in this. The average merchant builder (and some not-so-average ones) does not always catch a bad plan before it is too late. For example, one of the most famous US builders is currently selling \$13,000 houses *whose living rooms have no less than five doors!* Now this may be a reasonable plan to produce the kind of traffic pattern you want in Grand Central Station, N. Y., on a late Friday afternoon; but few families would consider the atmosphere of Grand Central Station ideal for home life, and some even like to have furniture in their houses. This, however, proves impractical in our five-door living room; for unless you nail all your furniture to the ceiling, you can't even use the living room as a corridor. (For living, use the garage.)

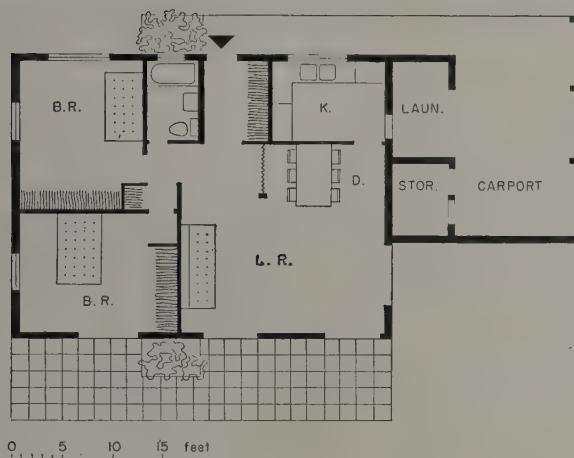
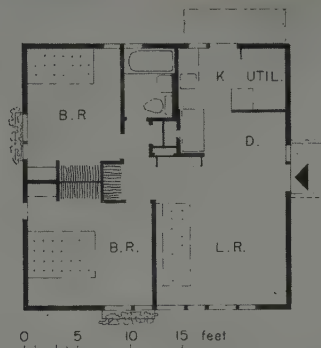
Lest this particular builder house appear to be an extreme exception, we have tried to analyze a number of other, commonly used builder plans. The houses in which these plans can be found are often modern enough on the outside; but what architects mean by a modern house is not just a lot of glass under a flat (or low-slung) roof; it is first and foremost and above all a new kind of plan. And it is this new kind of plan that American home buyers are beginning to demand, and that the FHA appraiser will have to learn to appraise.

There are probably not more than half a dozen different one-story small-house plans used by US merchant builders today. Some of them are very good, others are very bad. Some variations on a good plan can make it better, some variations on a bad plan can make it at least workable. Here are the five most common builder plans, and here are the pros, cons, variations and improvements on each:

MINIMUM PLAN— once the most common builder house,
it is now inadequate for all but a few families

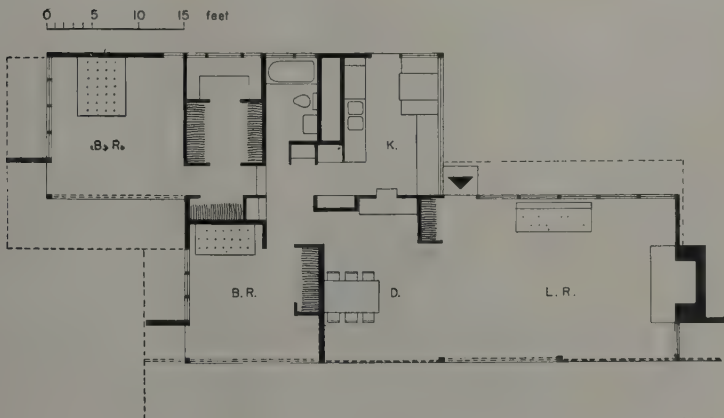
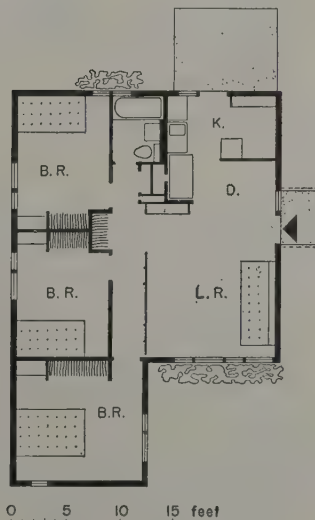
PROS: Low cost (due to tight periphery, concentrated services)
Little waste space
Fits narrow lot or row-house development
Can be turned around or flopped over for best orientation

CONS: Too minimal for families with children (two bedrooms inadequate)
Difficult to expand (but makes good "core" for bigger plans—see below)
Inadequate storage
No suggestion of entrance foyer
Dull street pattern when several are used



ABOVE: variation (by Robert Little, architect). At little extra cost, this variation on the basic plan gives you a real entrance foyer and a better relation of kitchen, dining and living areas to the lot. Living room always faces garden; kitchen always faces street. Service and storage facilities in garage wing make this a much more workable plan.

BELOW: expansion (by Hugh Stubbins, architect). Program dictated retention of basic two-bedroom core. This meant that additional bedroom was an emergency measure only, helped underscore basic awkwardness of plan: bath too far from third bedroom. Screened passage further reduces minimal living area.

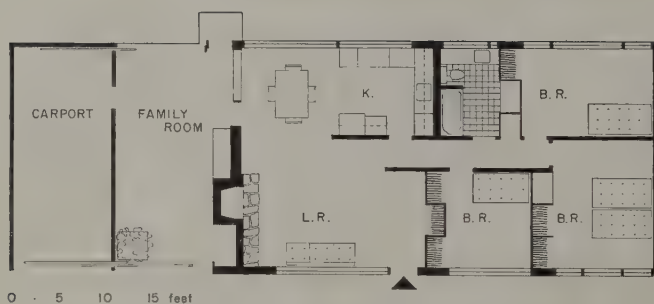
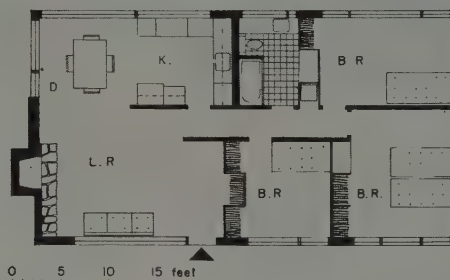


LEFT: expansion No. 2 (by Richard Neutra, architect). This custom-built house uses basic square plan for its core, shoots out wings in two directions. Solution retains economies of concentrated plumbing and minimal circulation space, adds expansive living, sheltered terrace and entrance areas, better cross-ventilation and orientation.

THREE-BEDROOM PLAN—one of the layouts most popular with builders, it falls short of first-rate planning

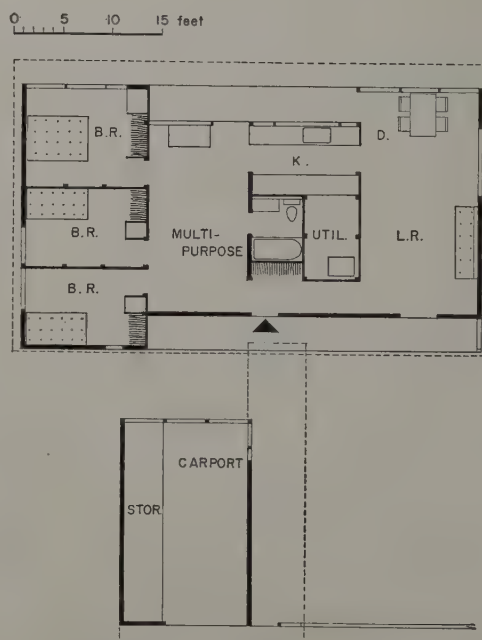
PROS: Economical to build
Few windows face adjoining lots

CONS: Living-room picture window faces street
Access to garden through kitchen or dining area
Large portion of living room is circulation space, cannot be furnished without turning back on "view"
No entrance control from kitchen

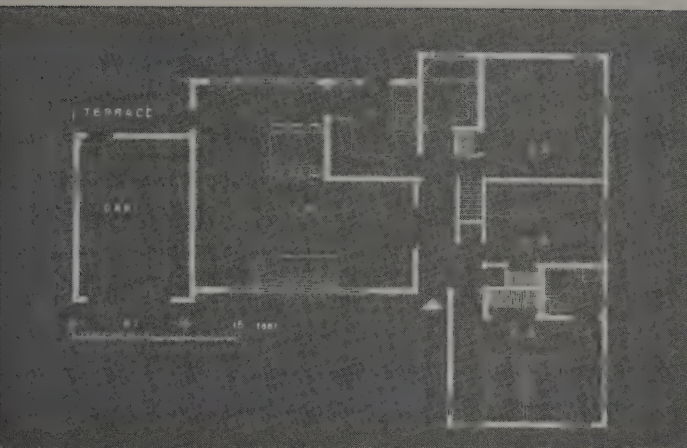


LEFT: expansion (by *W. A. Wollander*, designer, for Builder *Albert LaPierre*). Scheme recognizes inherent weaknesses of basic plan a) by adding to usable living space, and b) closely relating "family room" to rear garden.

RIGHT: variation (by *Ralph Rapson*, architect). Although this plan is several times removed from the basic scheme, it incorporates all the advantages of both the original and of the LaPierre version, plus a few of its own. For example: it has all utilities concentrated at the center; it allows direct access from kitchen to rear garden (and, thus, supervision of children); it has few windows facing adjoining lots; it has a cross-ventilated living area. In addition, it has the family room of the LaPierre house, but it is a more useful room since it adjoins the bedroom wing and it uses the garage and fences to screen the living area from the street. It also uses the utility core to form a little entrance lobby. (See also H-plan, opposite.)



RANCH-STYLE PLAN—the darling of many a builder,
this house requires a major surgery job to make it fit for human occupancy



PROS: Bedroom wing is sound-insulated

CONS: Living-room picture window on street

Living room is part corridor, tough to furnish

Access to garden through kitchen-dining area

Circulation areas snarled

Complicated and costly to build (many irregular breaks in exterior walls, roof line)

All bedrooms face neighbor's garage

Bad entrance control from kitchen

Street facade overly complicated, garden facade dreary and dull

Bedroom wing works only with second bath, long plumbing runs

Oddly enough, this plan needs only one drastic revision to make it good: it needs to be torn in half. For if you separate the bedroom wing of this house from its living-dining wing (see sketch), keep the entrance where it is, make kitchen and bath a part of the link (just as they are now), you will get the justly famous H-plan long admired by architects from coast to coast. The H-plan (see below) is one of the best solutions for a relatively narrow lot, and it need not be expensive—especially in warm climates.



Advantages of the H-plan (shown diagrammatically):

It creates two patios with plenty of privacy;

It creates similar privacy for daytime and nighttime areas;

It permits cross-ventilation in all rooms;

It can bridge differences in grade (the link can be a ramp);

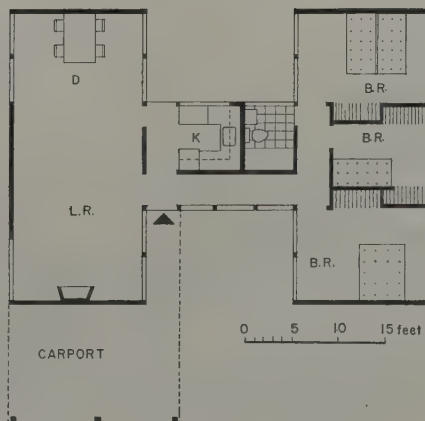
It can be planned with minimal plumbing runs;

It can produce a good-looking house;

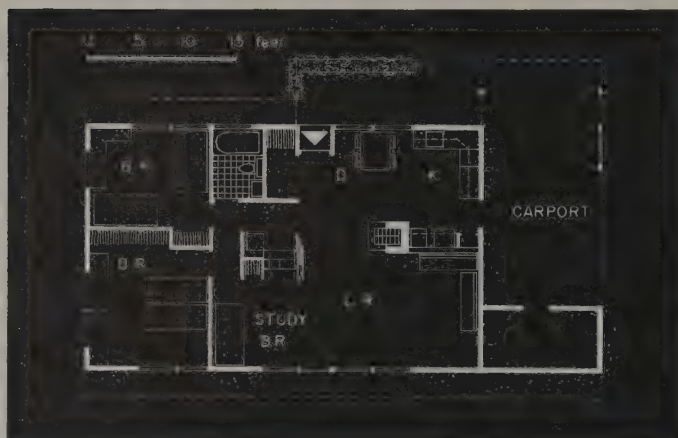
It can have higher ceilings in living area;

It can be turned and twisted to make the best use of any lot, views and orientation;

It consists of three simple rectangles that are easy and inexpensive to frame.

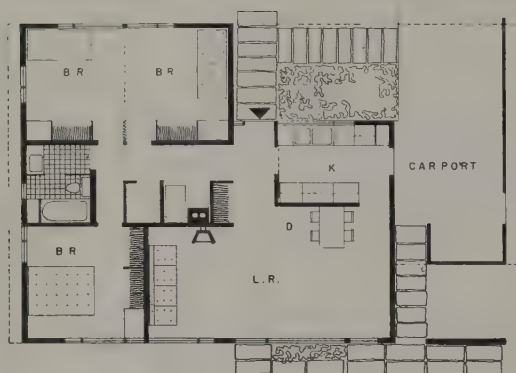


LEVITT LANDIA PLAN—a good adaptation of earlier architect designs,
this layout can be varied to achieve greater interest

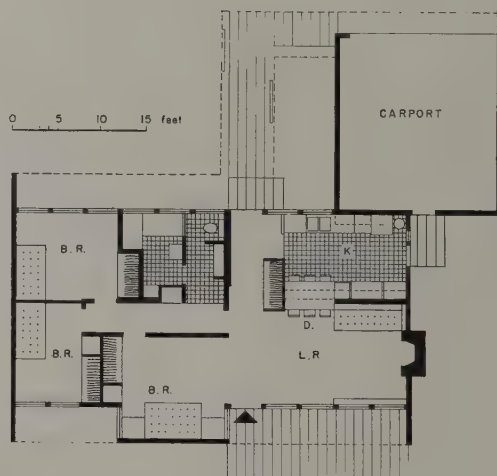


- PROS:** Compact, easy and inexpensive to build
Excellent circulation
Services face street, living areas face rear garden
Excellent entrance control from kitchen
One bedroom can be thrown into living area (such flexibility produces sense of spaciousness inside small house)
Entire plan can be cross-ventilated
Front and rear facades can be equally handsome, though different in character
Bedrooms are sound-insulated
- CONS:** Fireplace is badly located
Dining area too close to entrance

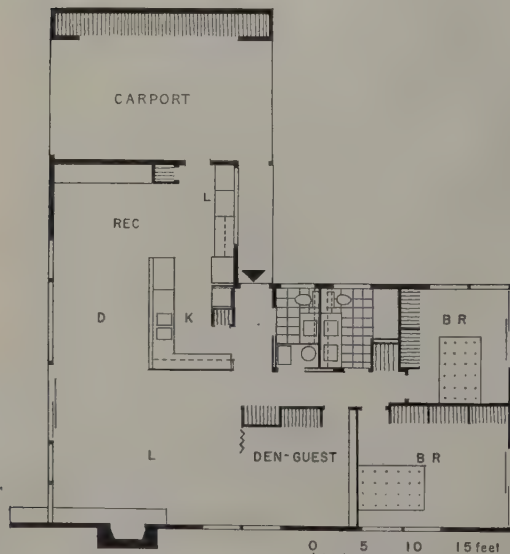
0 5 10 15 feet



ABOVE: variation No. 1 (by Bruce Walker, designer). Similar in principle to the basic Levitt plan, this house has a better entrance foyer, better location of fireplace and of dining area (which is more effectively screened from entrance), less compactly planned utilities.



ABOVE: prototype (by Richard Neutra, architect). Designed more than a dozen years ago, this Neutra plan has all the elements of the Landia house, plus a more useful terrace area. Note also Neutra's skillful placing of garage to break street monotony, interesting rear fenestration designed to avoid monotony of identical garden views. Fireplace is in good location, but dining area is perhaps a little tricky.

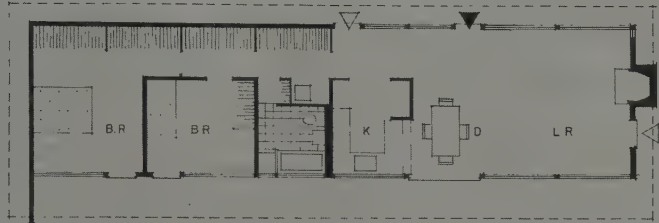


LEFT: variation (by Ned Cole, architect). The Trade Secrets house, close variation on Bruce Walker's theme (above left), has all the advantages of the latter, plus a family room in back of the kitchen and a better concentration of utilities. Walker's plan, however, boasts three bedrooms, plus an emergency sleeping area in the living room. (Plan here is reversed.)

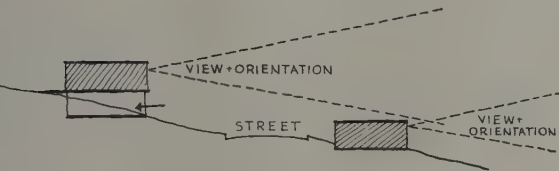
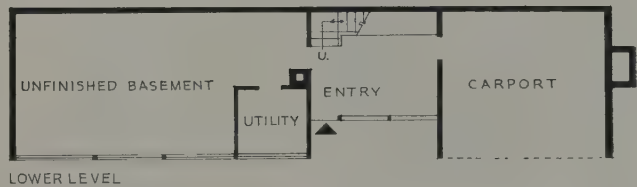
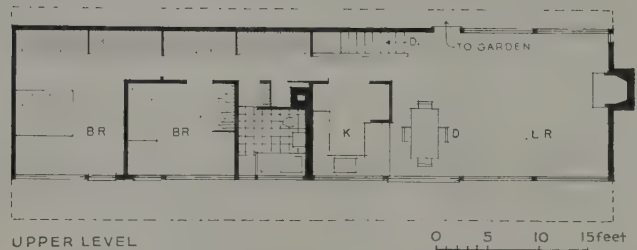
IN-LINE PLAN—a fine house whose potentialities have yet to be fully explored

PROS: Easy to construct on regular frame
 Good circulation (but long corridor)
 Concentration of services
 Flexible in site-planning
 Good storage in right places
 Easy expansion (or alteration to turn last bedroom into teen-ager's private "apartment")
 Good entrance control from kitchen

CONS: All views identical
 Requires an exceptionally wide lot
 Pullman-car plan a little monotonous
 Equally good orientation difficult on opposite sides of street (see below)

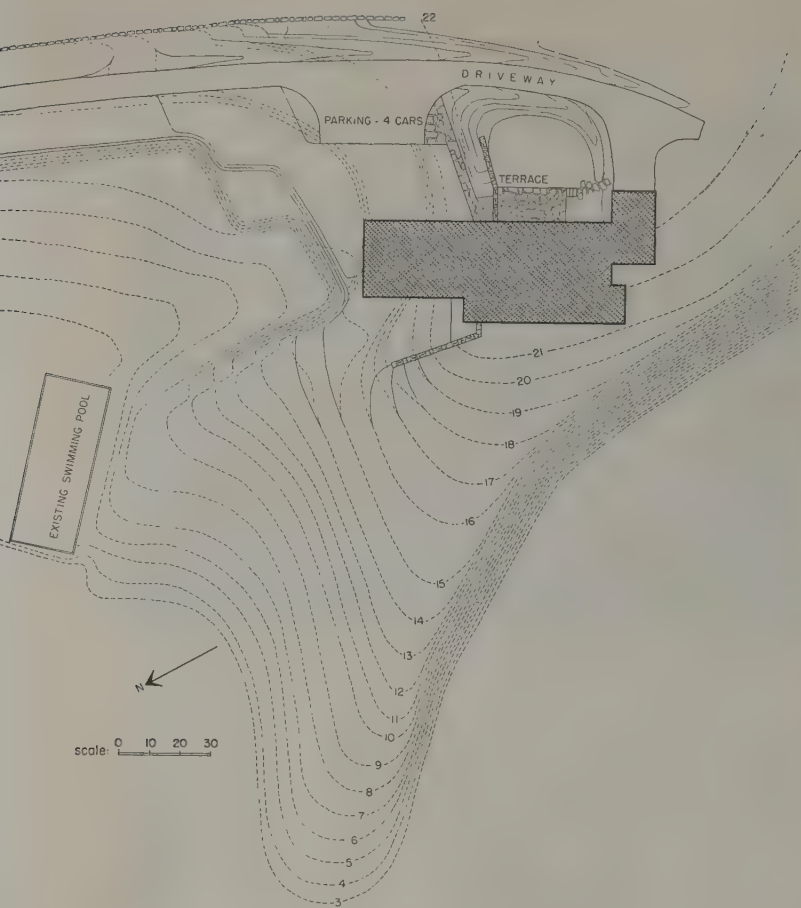


But the real potentialities of the in-line plan have not yet been fully explored—for this house can be a two-story house as well, and a combination of the two types can make a fine development, especially on a sloping site. Here is how: the uphill side of each street could use the two-story type (with garage, storage and entrance in the partly exposed "basement"), while the one-story type, facing the same way, could be built along the downhill side of the street. That way both sides of the street could have good views and good orientation, and both sides would have equal privacy (since the two-story-house living room is sufficiently high up in the air). For a suggestion of how this could work, see sketch below.



Here, then, are five basic plans. Almost any builder house put up today is a variation on one of them, or a combination of two or three. Generally, the best results are achieved when an architect does the varying, adapting or combining.

One more point: most builders have only one plan for any given development. This is inherently wrong, for a plan that makes sense on the north side of a street cannot make sense on the south side, and vice versa. The above analyses do not deal in detail with the problem of orientation; but of all the problems faced by builders of communities, that one is the trickiest and the most serious.



LOCATION: Franconia, New Hampshire
 DAN KILEY, architect
 JAMES J. VIETTE, general contractor

Architect and overhang. Kiley stands on north porch of the house he designed, outside large living room. Below is outdoor sheltered terrace, with fireplace and chimney in rugged masonry wall. Overhang is supported on pair of strong steel sections which were painted and left exposed. House is entered at the lower level (see plans, p. 153).



Photos: Lionel Freedman

Battens, boulders and glass

A unique New England dwelling is amassed of old barn timbers

Here is a summer vacation home and winter ski lodge as rugged as the New England White Mountains around it. The architect, Dan Kiley—who is quite a rugged New Englander himself (see picture left)—designed it after fire had destroyed a house he had just remodeled for the same owner. It is built with timber salvaged from an old barn on the place so, since he got it for nothing, he used the wood profligately.

The barn's 8' x 8' framing members are erected into a solid wall in the new house, lined up and exposed on the interior, papered and batten-boarded on the exterior. Also available were beams and planks for the floors, as well as other miscellaneous lumber. This explains the very grainy character of the finished house. It also explains the handsome timber trusses which were left exposed in the long living room.

In this house the sometimes overpowering effect of so much wood is offset by frequent partitions and planes of composition board painted in bright colors. In the living room the ceiling is blue, elsewhere white. Large glazed areas and carefully built-in lighting also help to keep the atmosphere cheerful.



Exposed timber in living room (wall right) is honest. This wall is as strong and solid as the wood trusses overhead



Northwest wall of living room is glass, with wide overhang sloping down to shade it. Glass is single thickness ($\frac{1}{4}$ " plate), with floor registers to curtain it with forced warm air.

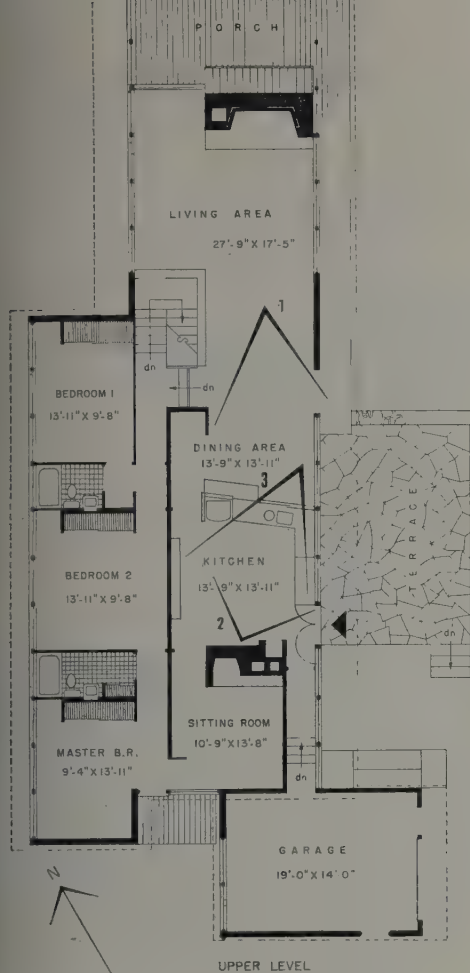
LARGE MATERIALS AND LARGE AREAS

Entertaining calls for big spaces and this house has them on two levels. The entire downstairs area can be opened into a single space; a large sliding door opens from entrance hall to covered terrace, and another folding door opens on an adjacent terrace which leads to a swimming pool. Upstairs is spacious too. A large sliding door opens out to the balcony on the east and there are doors from the living room and kitchen to a slate-surfaced terrace to the south. Sliding plastic panels separate the kitchen from the dining-living room and when these are opened the total effective length of this whole area is 55'.

The amount of glass in the living room walls also extends the boundaries of this room out over the slope; to the south is an uninhabited view of Lafayette and Cannon Mountains, and to the east, north and west are views of distant mountains with Franconia in the foreground.

Buttressing all this space at each end of the house are large flanking rubble stone walls which appear to run through and under the house, setting it permanently into the hill. The house is 3,500 sq. ft. (figuring one-half usable area for the basement) and cost \$35,000, excluding land and fees but including retaining walls and grading. The saving on timber was figured at not more than \$1 per sq. ft., and the solid wall was not easy to put up.

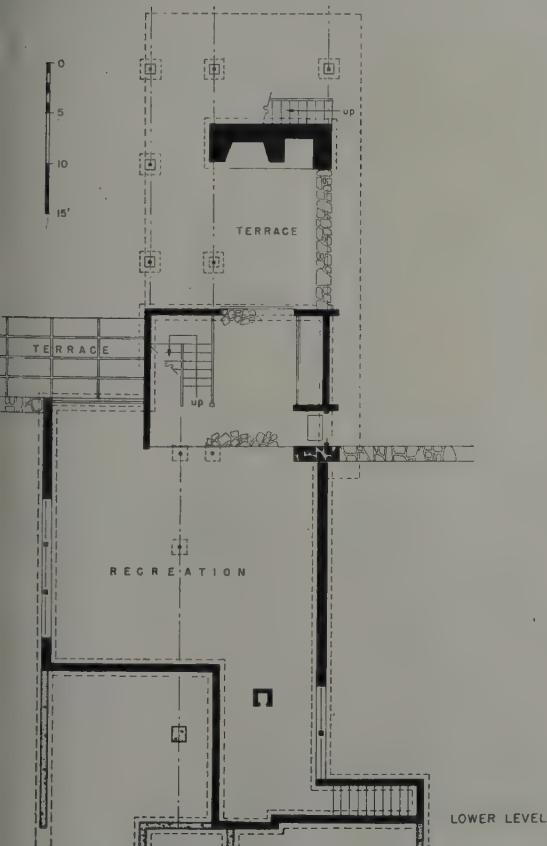
A LONG OPEN SPACE FOR ENTERTAINING



1. Dining area continues living-room space. Kitchen counter slides open



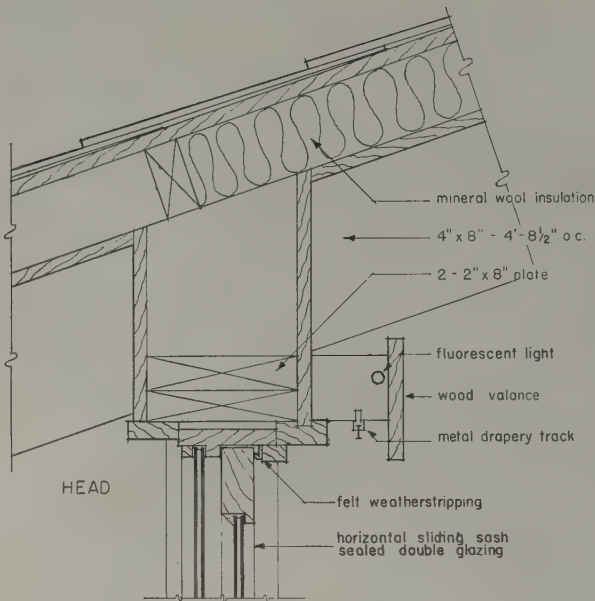
2. Reverse view of above, looking from the working side of the kitchen



3. Kitchen: custom cabinetry, hardwood counters, Dutch oven, ample space

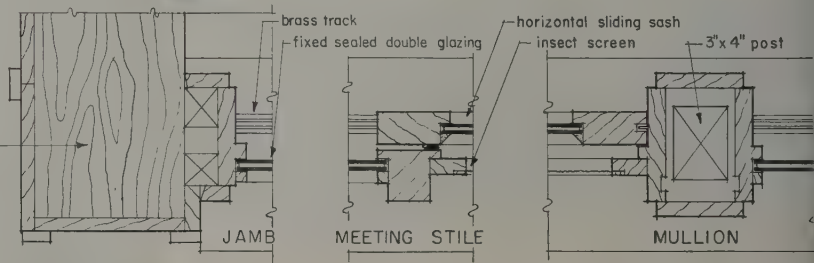
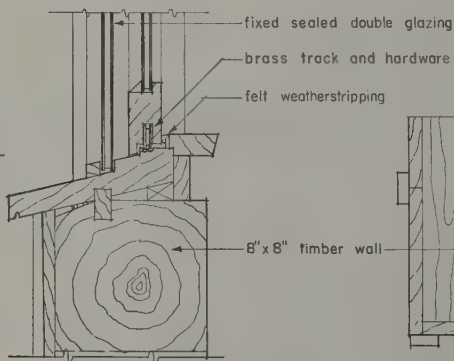
AN INGENUOUS, ADAPTABLE WINDOW

Combination sliding sash and fixed glass is repeated throughout house. A custom detail, it alternates sheets of fixed glass with side-sliding windows. When ventilation is desired, the framed glass can be shifted over inside the fixed glass. Outside, screening continues the line of the fixed glass over the opening.

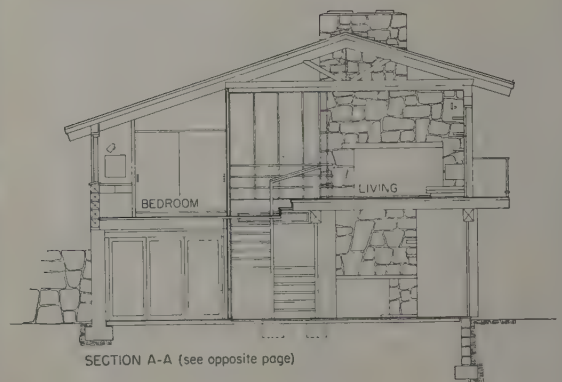


HEAD

SILL

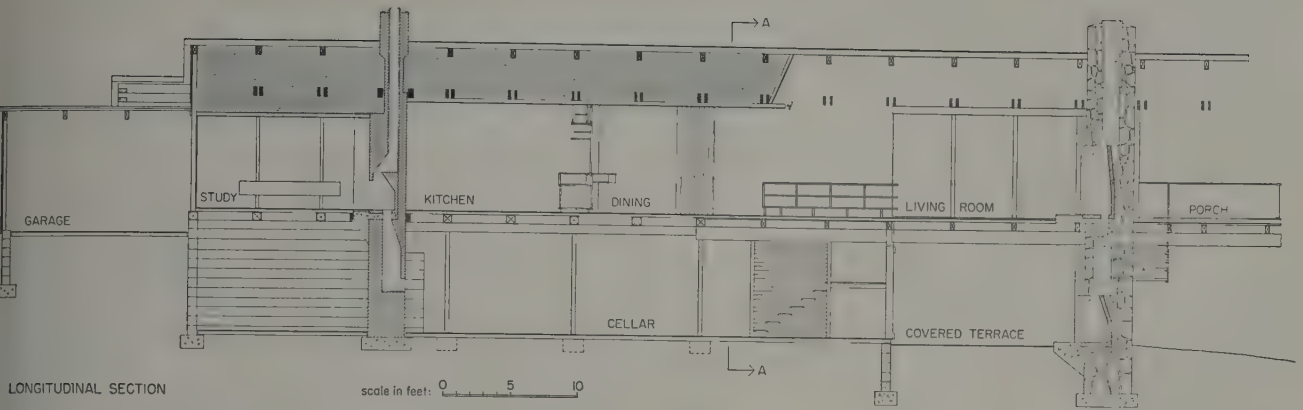


A NOOK WITH A VIEW



Dressing table is built into each bedroom to lengthen window wall, avoiding a waste of exterior periphery on closet-ends. Change in floor level (above) saves ceiling height for bedrooms under long slope of roof.

RR CAR—WITH OBSERVATION PLATFORM



Boxcar dimensions are evident in section above. Reason: rapidly sloping site had only small flat shelf



How to erect an expansion-attic truss

Here are details on the University of Illinois Small Homes Council's open-hearted truss, which will allow housebuilders to combine two advantages:

1. Clear-span structure, from exterior wall to exterior wall on the main floor of houses, without interior bearing members.

2. Expansion-attic cubage, on the "attic floor." This space exists in all houses built today with trussed roofs, but is unusable because it is slashed by truss members.

But now the alternatives—trusses **or** expansion attic—have been combined into a new possibility: trusses **and** expansion attic. This significant development in house design has long been discussed, and pleaded for (*AF*, Feb. '51), and was previewed last summer (*H&H* exclusive, Sept. '52). And now, on these six pages, here's how:

University of Illinois Small Homes Council

JAMES T. LENDRUM, director

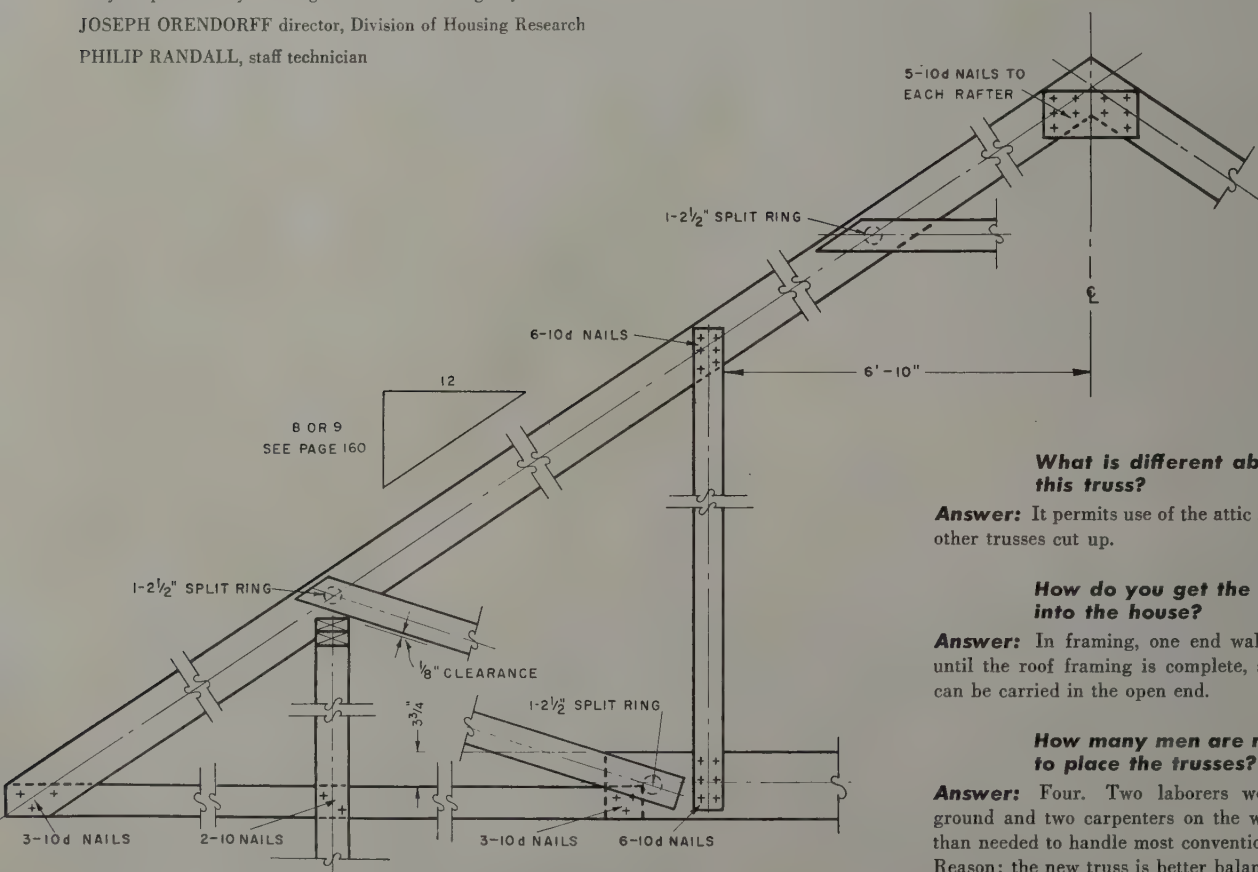
WILLARD J. WORTH, research associate

SIDNEY B. BERRY, architectural assistant

Project sponsored by Housing & Home Finance Agency

JOSEPH ORENDORFF director, Division of Housing Research

PHILIP RANDALL, staff technician



What is different about this truss?

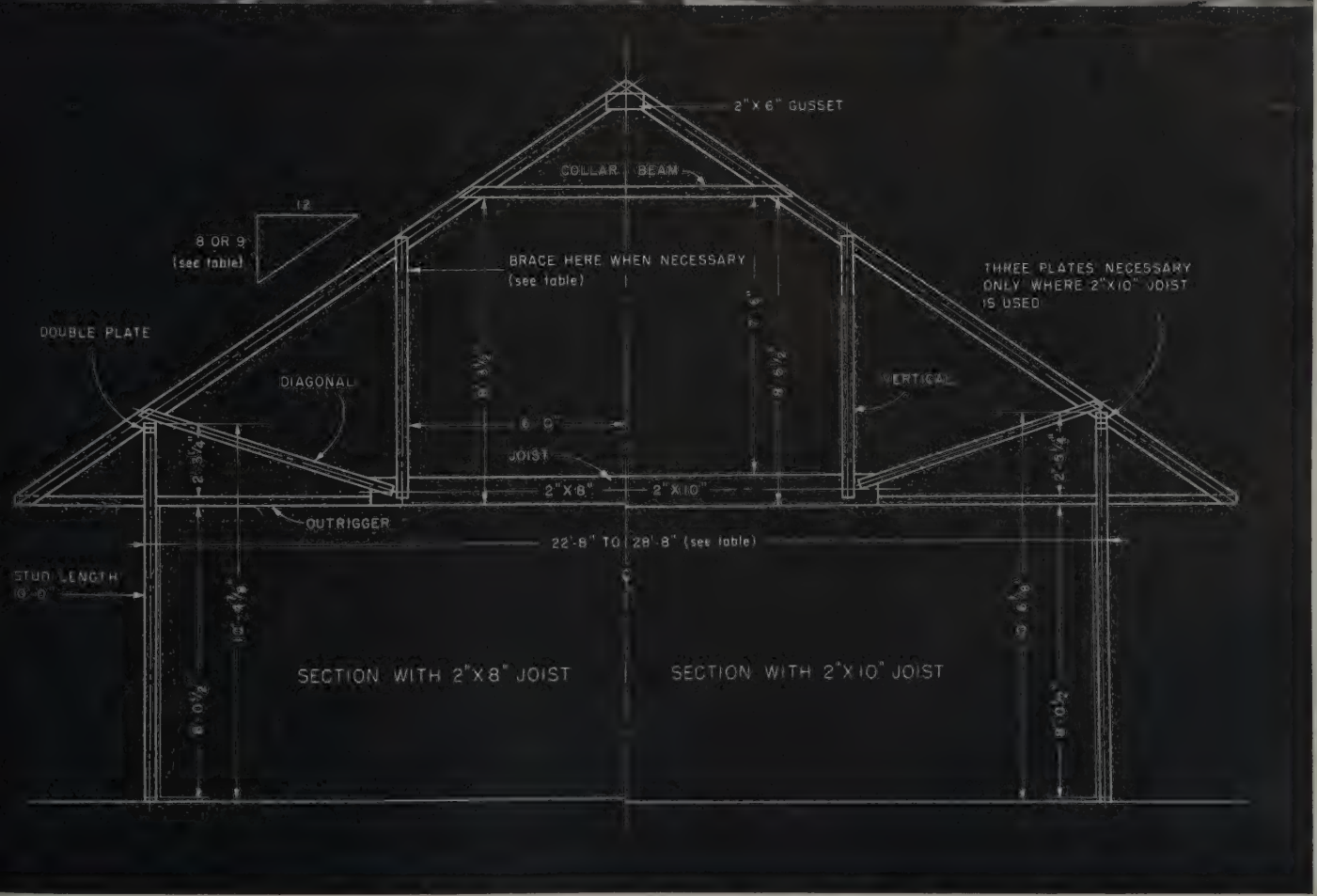
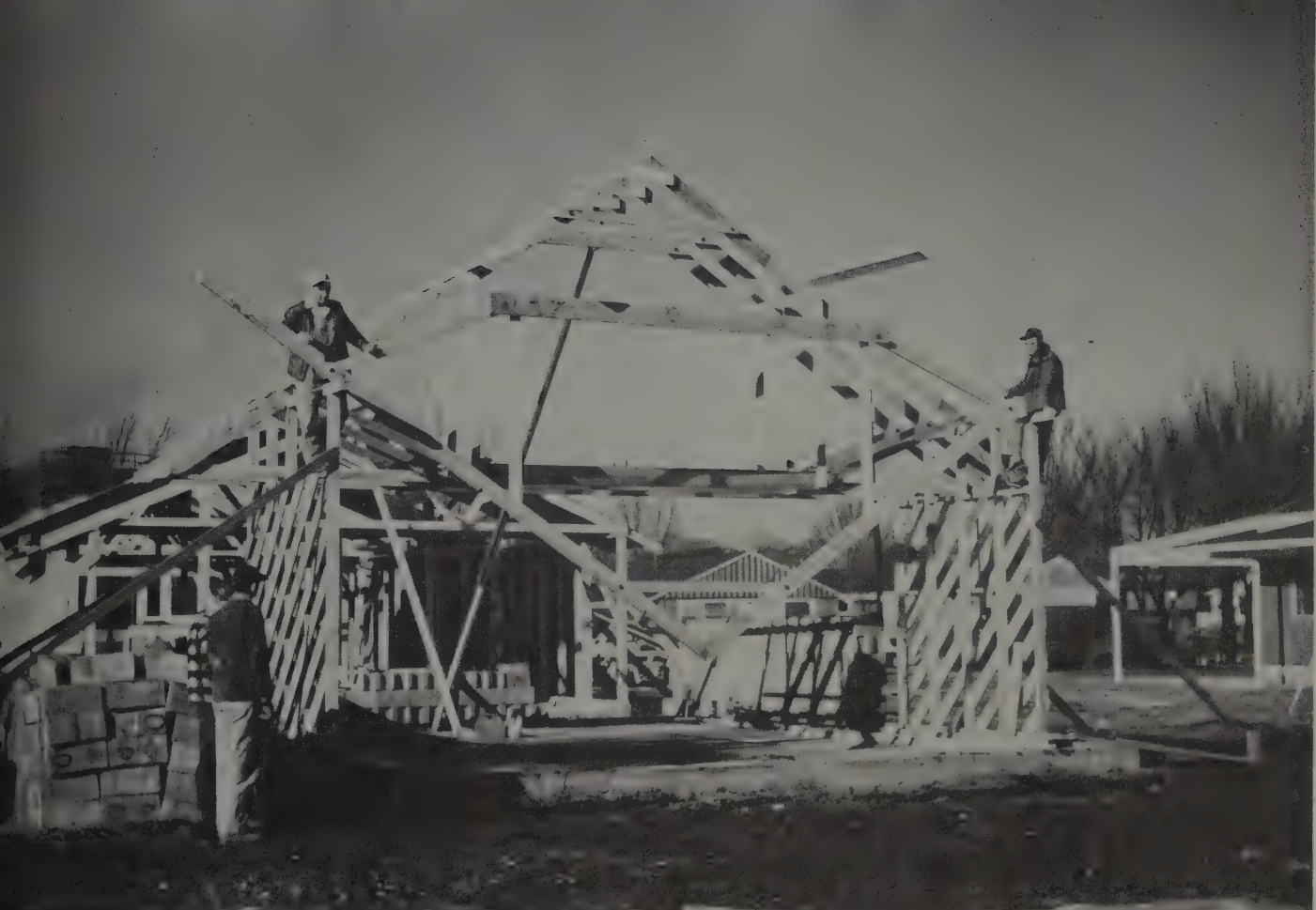
Answer: It permits use of the attic space which other trusses cut up.

How do you get the truss into the house?

Answer: In framing, one end wall is left off until the roof framing is complete, so the truss can be carried in the open end.

How many men are needed to place the trusses?

Answer: Four. Two laborers work on the ground and two carpenters on the walls—fewer than needed to handle most conventional trusses. Reason: the new truss is better balanced.



What is the procedure?

Answer: See pictures. The groundmen carry the truss from the stack to the open-ended buildings where they swing one rafter tail up over the plates. The other end is then handed up and the men above take over, leaving the ground men to carry another truss. The truss, still upside down, is positioned so that it will clear the trusses already in place as it is rotated. With a short backswing, the men push down on the joist and rotate the truss into the vertical position. Then they slide it along the plates so that the rafter bears over the studs, which are 2' on center (to set studs directly under the ends of the truss).

Timing works out well in this operation: there is a necessary lag in placing trusses, because they are first placed upside down and must be spun, so they must be placed one by one. But by the time the two groundmen have gone back to the stack to return with the next truss, the space is clear again. The trusses could be transported in trucks and stacked in them at the site, but the same wait between the placing of each one would be necessary unless a crane was used.

After the truss is properly placed, toenailing suffices to hold it in place until the framing anchors are set.

Spacer boards, which are nailed to the rafters, can be premarked with 2' spacing as a check.

After all the trusses are in place the outriggers are nailed to the rafter joist and wall stud. After the trusses are complete the end wall of the building is framed and tipped into place.

Is this a true truss?

Answer: It is what is known technically as an indeterminate trussed frame.

How strong is this truss?

Answer: Spaced 2' on center, it was designed for a roof load of 20 lbs. per sq. ft. and a floor load of 30 lbs. per sq. ft. The slope of the truss is either 8 on 12 or 9 on 12, depending on the span (see table, p. 160). This design is completed and details are available from the University of Illinois Small Homes Council for spans of 22', 24', 26' and 28'. Under test in Urbana for a period of 134 consecutive days, the greatest amount of deflection under floor, roof, or eccentric loading was $1\frac{1}{8}$ ". Of this deflection approximately half was in joists, half in the truss itself.

What size joists should be used?

Answer: 1) If the room built in the expansion attic is to be used only as a bedroom, and if a dry plasterboard ceiling is used, the truss will be satisfactory with No. 1 grade, 2" x 8" joists; 2) if the expansion attic is to include a bathroom or if the first-floor ceiling is wet plastered, No. 2 or better joists should be used. This extra strength is to guard against excessive deflection and stiffen the floor.

With the exception of the joist, the design of this frame was based on the use of 1,100 psi or better-stress grade lumber with the grading provisions applied throughout the length of the members. Yard grades (No. 2 or better) of some species of wood meet these specifications while others do not.



**What kind of wall
should be used with this truss?**

Answer: These trusses were designed to sit on a 10'-high stud wall. Reasons: this height eliminates several connections, allows the joist load to be taken more directly by the wall, and furnishes a means of providing some bracing of the roof and walls against wind loads, since the outrigger—to some degree—acts as a knee brace.

**What about
bracing during construction?**

Answer: Since only one truss at a time is hung on the walls, and the notches of the other trusses tend to hold the open-ended walls in, bracing is less critical than for a single-story truss erected in the usual way. But it is important that the open end of the building be braced strongly to a solid support.

**How much material is
in the truss?**

Answer: For a 24'-8" span (outside wall to outside wall) one truss contains 97.5 board feet of lumber, $\frac{1}{2}$ lb. of 10-d nails, six $2\frac{1}{2}$ " split rings with bolts and washers.

**How much time should it take
to place a truss?**

Answer: At the University of Illinois the actual elapsed time on the operation was clocked at about $3\frac{1}{2}$ min. for erecting and bracing the truss, plus $1\frac{1}{2}$ min. for placing the outriggers.

How much does a truss cost?

Answer: The estimate by the Small Homes Council for one truss in place is \$20.78. This is in one-house quantities, however, and larger volumes could be expected to reduce this cost.

**Are there any special
precautions to be observed?**

Answer: One or two. This type of construction does not allow the laxness of conventional framing. It is essential that members of the truss not be notched or drilled to pass plumbing or wiring lines, and the truss must be carefully loaded in one respect: the space between the wall verticals and the eaves is dead space and the construction is not designed to carry storage in this area.

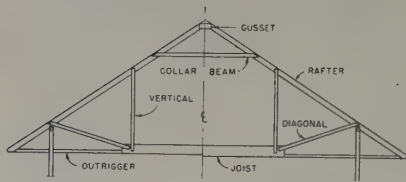
What about stairways?

Answer: They must parallel the trusses, whose spacing is changed to open up a slot for the stair run. The spacing: 2'-6", 3'-6", and then back to 2' on center. This pattern uses one extra truss, but provides necessary additional stiffness at stair wall, and maintains the 2' ceiling module.

**What about concentrated
loading, like bathtubs?**

Answer: Don't place them so they occur in the center of the joist span, and try to place them so they can take advantage of extra strength built in at the stair opening. The trusses which carry these heavy loads should have extra nailing (see drawings, p. 160). Water heaters or other excessive loads should not be placed on the trusses.

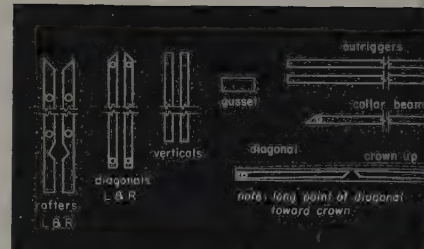




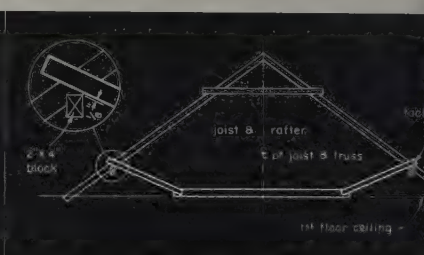
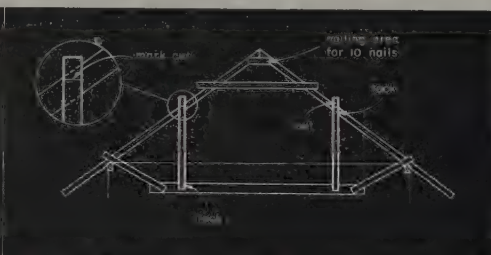
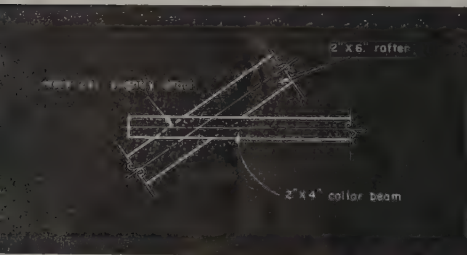
SPAN OUT TO OUT	SLOPE	RAFTER	COLLAR BEAM	VERTICAL	DIAGONAL	OUT-RIGGER	JOIST
22'-8"	9/12	2" x 6" x 20'	2" x 4" x 8'	2" x 4" x 7'	2" x 4" x 6'	2" x 4" x 9'	2" x 8" x 14'
24'-8"	8/12	2" x 6" x 20'	2" x 4" x 8'	2" x 4" x 7'	2" x 4" x 7'	2" x 4" x 10'	2" x 8" x 14'
26'-8"	8/12	2" x 6" x 22'	2" x 4" x 10'*	2" x 4" x 7'*	2" x 4" x 8'	2" x 4" x 12'	2" x 8" x 14'
28'-8"	8/12	2" x 6" x 22'	2" x 4" x 12'*	2" x 4" x 7'*	2" x 4" x 9'	2" x 4" x 12'	2" x 8" x 14'

1 This table lists the members and sizes for four spans of this trussed frame, using 1,100 psi stress grade lumber (grading provisions to be applied to entire length). Collar beams for the two wider spans should be braced laterally at the center with 1" board or solid

2" blocking between members. Joists should be 2" x 8"s at 1,450 psi grade, or 2" x 10"s. All gussets should be 2" x 6"s. In all members knots or other defects should not occur at sections which are notched or drilled for rings.



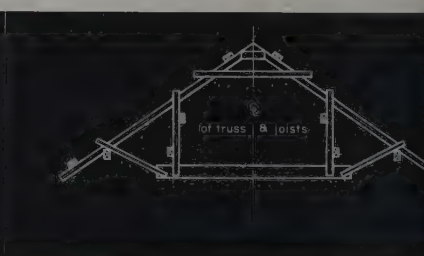
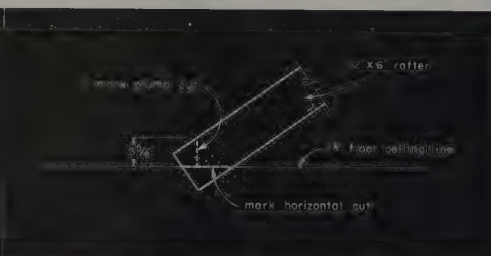
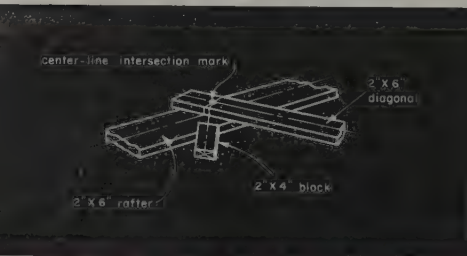
2 Precut members for one truss



11 Check that rafters are in tight bearing at ridge, snug against blocks as notches. Mark intersection of center line of collar beam and rafter. Drill 9/16" hole at intersection to mark rafter. Mark bevel cut on collar beam. Mark side of members that receive ring.

10 Place verticals on wall lines as shown. Tack verticals to rafters to hold and mark square cut on verticals. Place 2" x 6" gusset and mark necessary length. Check that there is sufficient area for five nails each side of joint.

9 Place joist assembly against first-floor ceiling line as shown and center joist on centerline of truss. Swing diagonals up until they clear jig block by 1/8". Tack diagonals to rafters off center so joint may be drilled later.

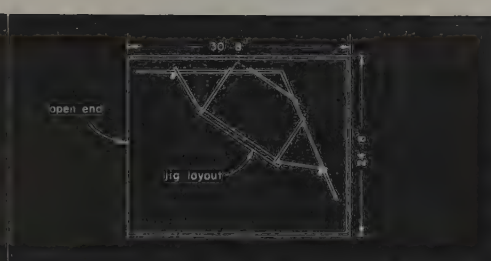
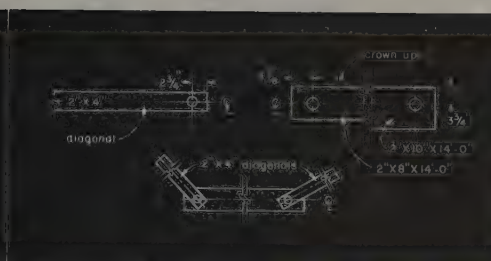
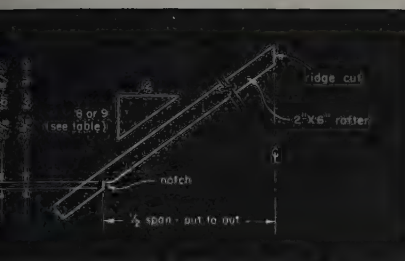


12 Mark intersection of diagonal and top-chord center lines. Intersection should occur approximately on center line of vertical block. Drill 9/16" hole to mark point on top chord. Again; check constantly that drill is vertical. Mark side of members that receive ring.

13 Mark a horizontal cut and a plumb cut 3 5/8" long on rafters.

14 Place whatever blocks are useful for quick assembly of remaining trusses. Remove and disassemble truss. Using these as patterns, cut, drill and rout members for remaining trusses.

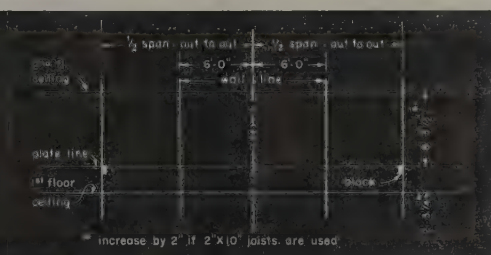
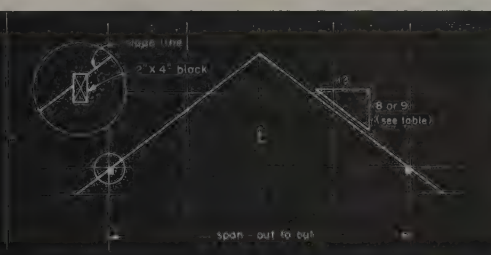
Caution: rafters and diagonals should be cut, drilled and routed for rings in pairs, left and right. Remaining trusses may be assembled in same sequence.



To begin subassembly, use table (1) to determine proper slope, member sizes, and lengths for out-to-out span. Then cut two 2" x 6" rafters.

4 Drill one end of two diagonals for 2½" split rings. Drill both ends of 14'-0" joist for 2½" split rings. Complete one subassembly by inserting rings and bolting diagonals to joists.

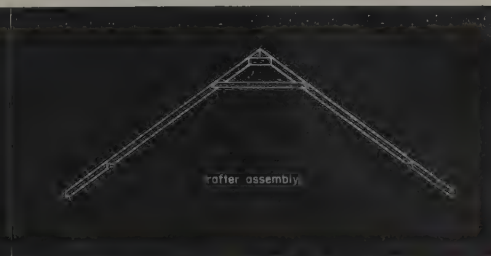
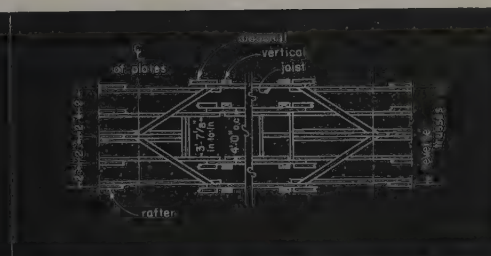
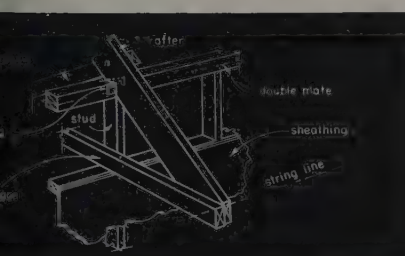
5 Jig for 24' truss may be laid out on 30' x 24' floor space as shown in plan above, allowing for material storage and working room. End wall is open, for removal of truss.



Lay rafters against chalk lines and fit notches snugly against blocks. Tack to deck near blocks. Place collar beam so that its bottom edge is on second-floor ceiling as shown. Tack collar beam to rafters. Note: tack off center so joint may be drilled later.

7 From inside upper corner of blocks lay out lines at proper slope for span. Check out-to-out dimensions of blocks against span.

6 On deck lay out three parallel lines as shown. Increase by 2" if 2" x 10" joists are used. Lay out vertical center line. Lay out parallel lines at 6'-0" and ½ exterior-wall-to-exterior-wall span on either side of center line. Place 2" x 4" blocks as shown.



5 Space trusses 2'-0" o.c. so that rafter notch bears over stud. Fasten to plates with metal framing anchors.

After all trusses are erected, run string line for fascia. Place outrigger and mark as pattern to clear bolt at joist assembly. Outriggers are structural members and must be placed before truss is subjected to load.

16 How to frame the stairwell:

- Start at closed end of building. Erect trusses with verticals and diagonals facing closed end until stairwell is reached.
- Substitute rafter assembly for next truss (center of stairwell).
- Erect remaining trusses with diagonals and verticals facing open end of building.
- Place outriggers on all trusses; place joists

on stairwell trusses with continuous members as deep as joists. Spike together throughout length.

- Install headers of joist depth at head of stairs. Place doubled 2" x 4"s at opposite end.
- Place doubled outriggers at rafter assembly and brace diagonally with 2" x 4"s laid flat.
- The 4' o.c. spacing of stairwell trusses is based on dry-wall module. Lesser spacing may be used.

Adhesives pave way for tile economy

Thin-set adhesives for ceramic tile are doing to the tile setters what dry-wall construction did to the plasterers: they are breaking up the monopoly that one craft has had in the building industry

Use of thin-setting bed adhesives for tile has done more than just cut its installation cost; it has brought competition to the tight little combine of tile setters who have charged as much as \$3.50 per sq. ft. for tile setting, or whatever the traffic would bear. In a Nov. 1950 article, ARCHITECTURAL FORUM noted the economies and advantages of adhesives. Many builders and tile setters were quick to see a way of getting or setting more tile at lower cost; other tile men grudgingly used adhesives; still others were and still are holdouts. But today few have an excuse not to use adhesive (a commercial standard for its manufacture was established last July by the Department of Commerce), and many are being pressed by healthy competition to adopt it (to compete with tile setters who now use the method and other crafts that need no knowledge of the art of mixing and troweling mortar to set tile).

"We weren't going to touch adhesives at first, but then we found out we were losing business to the linoleum layers." That comment from a New Jersey tile setter is typical of the growing attitude among tile men. Many builders know tile can be set a third cheaper by adhesives. Often the cost of finishing a bath by tile alternates is based competitively on the cost of mortar-set tile, the substitute being pegged at 25¢ per sq. ft. cheaper.

"It was not until a new tile company came to town and started to set tile by adhesives that we felt we were getting a fair price on tilework," says Don Scholz, Toledo builder. "Competitive prices are the greatest incentive to more extensive use of tile because every builder is convinced of its advantages."

Variation in the installed price of tile is greater than for any other item that goes into a house, says James T. Lendrum, director of the University of Illinois Small Homes Council. In some cities in the Midwest costs run well above \$3 per sq. ft. In Philadelphia costs run from \$1.75 to \$2 per sq. ft. when tile is set in mortar, about \$1.50 when set in adhesive. In-place cost in the New York metropolitan area where competition is keenest is as low as \$1 per sq. ft. for adhesive setting, is generally close to \$1.25 per sq. ft.

A rule-of-thumb method builders can use to determine how much tile setting should cost in their areas is to deduct about 20% from the cost of a mortar-set job. Since a mechanic's helper is not needed for adhesive setting, an immediate economy is possible.

In areas where tile setting is not controlled by a tile-setting monopoly, carpenters, masons, plasterers—even the builders' own crews—are doing the job. But many union and nonunion tile setters have read the handwriting on the bathroom wall and are now setting tile at a price almost any builder can afford to pay.

Tom Dolan, a tile setter who has used adhesive since 1949, is one contractor who has done an excellent job. His St. Louis County Tile Co. set over 1,000,000 sq. ft., saved builders almost \$300,000.

More tile for your money

Builders can cash in on the economies brought on by more competition and put more tile in the bathroom where it will last as

long as a house and never cost the home owner another paint job.

Here are five ways to cut corners or get more tile for your money:

1. Use seconds instead of standard tile. Prices on seconds (which vary only slightly from standards in shade or "pimples") are several cents a sq. ft. cheaper. Many contractors use seconds for standards because variations are so slight.

2. Set tile at the same height from the floor on all four walls. Tile men can thus eliminate the time-consuming job of mitering joints and fitting extra corners or caps as when they drop from 4 1/2' over the tub to 4 1/2' from the floor over basin and toilet.

3. Add an additional 1' or 1 1/2' to the height of your tiling. Since most tile men restrict themselves to one bathroom a day, they can do the additional area with no great effort. One union tile contractor says: "I would take the tile up another 1 1/2' for just the cost of the tile. My men will do only one room a day, and if there is more tile in the room, they will still get it done in a day."

4. Set tile all the way to the ceiling. By using adhesive-set tile on dry wall, you can get an entire bathroom (about 150 sq. ft.) tiled at the same price as it would cost if you were to use wet plaster and tile set in mortar. When a ceiling is uneven, as is frequently the case, tile may accent the flaw. Solution: stop the tile 1' from the ceiling except in the tub alcove.

5. Use a thinner tile. Although it is no cheaper FOB the plant, it will be cheaper at the point of use because of a decrease in freight costs. A carton of ordinary-thickness tile (from 5/16" to 3/8") weighs about 55 lbs. and contains 15 sq. ft. A carton of thin tile (about 1/4" thick) weighs 53 lbs., contains 20 sq. ft. The saving in freight costs should be passed along to the builder. Dividends: more pieces of thinner tile (8 vs. 5) can be held by the tile setter while he is setting it against the wall, allowing him to work faster and more efficiently.

Advantages of the thin-set method

Lower overhead. The adhesive method can cut builders' overhead: the usual three- to four-day cycle for mortar setting can delay other trades working in the house at the time (they often must return to finish up after a tile setter is through). Builders frequently waste money on tiling by having it started before the plumber has completed his work; then the tile man returns to complete the wet end of the tub. In some instances the reduction in time for tile setting (it takes only one day for everything, including grouting) can mean a 10% to 15% cut in overhead applied to the house.



Floating method of applying thin-set adhesive to gypsum board is done by tile setter who uses a notched trowel.

Tile is quickly set in place after adhesive dries slightly.



Wendell Chilton



Subfloor is plywood which is covered with insulating paper over which adhesive has been applied.

Economy. Installation cost (all costs except tile itself) can be cut as much as 42% by the adhesive method, as this comparative cost breakdown from one union and one nonunion contractor in the New York area indicates.

Mortar method		Adhesive method	
		MATERIALS	
Sand (1½ yd. or 500#)....	\$ 1.50		
Cement (3 bags or 300#)...	3.60		
Lime (2 bags or 200#).....	3.20	Adhesive (2 gals.)	\$ 6.00
Tile (100 sq. ft. at 50¢ per sq. ft.)	50.00	Tile (100 sq. ft. at 50¢ per sq. ft.)	50.00
		LABOR	
Mechanic (\$3 per hr., 8 hrs.)	24.00		
Helper (est. \$2.50 per hr.)	20.00	Mechanic (\$3 per hr., 8 hrs.)	24.00
Total	\$102.30	Total	\$80.00

(These are costs to the subcontractor and should not be confused with prices to builders since these figures do not include overhead and profit.)

Waterproof. Dry wall can be used behind adhesives without fear of the dry wall rotting or the tile falling off. The new Hartford Statler Hotel baths will get adhesive-set tile because the management is convinced it will get better waterproofing from adhesives than from mortar. Adhesive can be used on almost any surface.

Protection. Since tile setters can be in and out of the bathroom in one day, no material need be left around to be damaged by other trades or pilfered by "lookers."

Less servicing. Stackler & Frank, Long Island builders, report that when adhesives are used they have never had to return to service a bathroom because tile fell, although they admit they have had an expensive time of it when tiles were poorly set in mortar. When a mortared tile falls out, there is often the danger of damaging adjacent tile when the old bed is chiseled out.

Bigger room dimensions. Several inches can be added to the minimum bath where every inch of space counts when thin-set tile is used rather than full-thick mortar setting. (Almost 1 sq. ft. of usable floor space is added for each 11.3 lin. ft. of wall.)

Dead weight reduced. Almost 12 lbs. per sq. ft. or over 1,000 lbs. in the 5' x 7' or 8' bath can be eliminated through the use of adhesive, thus structural members need not be reinforced.

Less cleanup. The powdery mess left by mortar and trekked through a house by plumbers and others is eliminated.

Work through the winter. Thin-set tile can be left in cold weather with no fear of damage to the bond. When mortar is used, heat must be kept up in houses on cold nights.

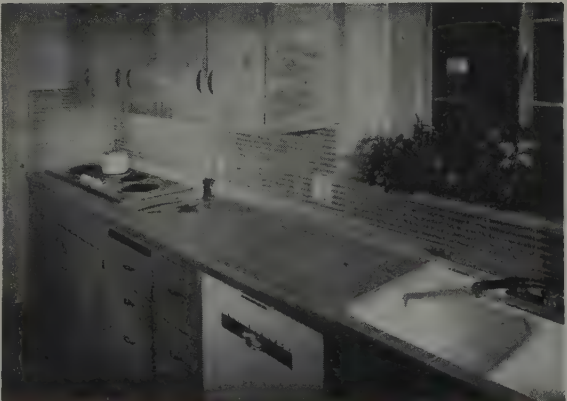


Adhesives bearing Commerce Dept. hallmark, left, can be used perfectly safely near stove ducts or around heat registers.

Buttering method — application of adhesive directly to tile itself — is used in some instances, as at right, for a plywood ceiling.



Cove tile for joining two planes was designed with 90° flat back to encourage use of cove, make it easier to install with adhesives.



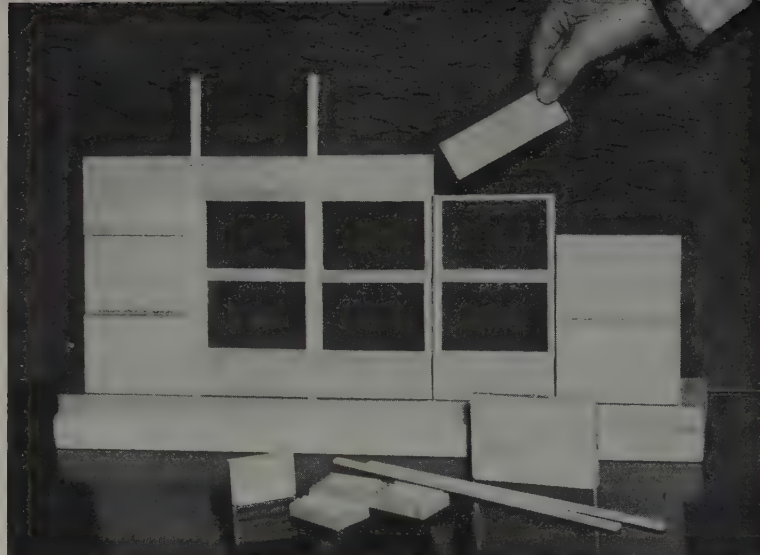
NEW PRODUCTS

THE WELL-STACKED HOUSE: modular panels pile up prettily in limitless patterns

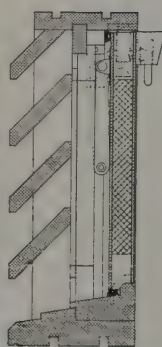
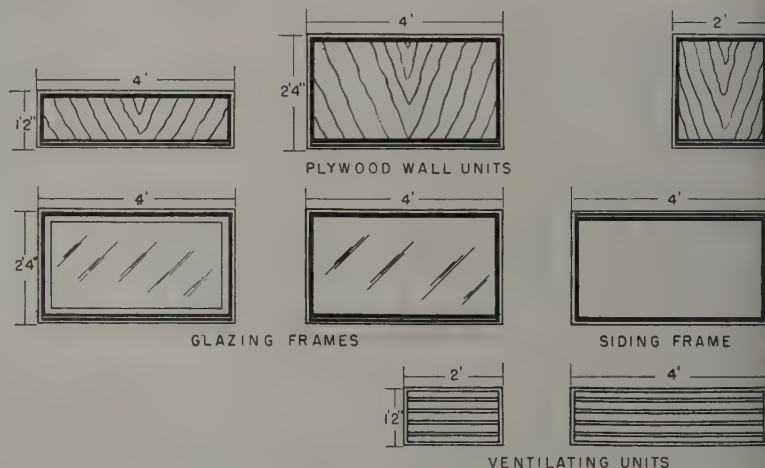
Solar Air Flo has grown up. First introduced three years ago as a window for fixed glazing with separate wood louvers for ventilation, it now has been moduled and modified to become a complete interior-exterior wall. Glazing, ventilating, and insulated plywood sections comprise the system. The 4' wide units each can take a 2,400 lb. load. They stack one over the other and are grooved to interlock on sides, top, and bottom. Wood splines strengthen the connections and act as weather seals. Vertical joints are masked by $1\frac{5}{8}$ " x $1\frac{1}{16}$ " trim strips. Sub-sills, 2" x 6" headers and doors finish the job. Two types of solid sections are available: one has an insulating board core and sells for \$7.60 for the 14" high, \$9.85 for the 28" high; the other, a lamination of plywood and fiberboard, costs \$13.50 for the 14", \$22.10 for the 28". Vent sections are made with louvers on the outside and an adjustable panel on the inside. Supplied with a removable built-in screen, a 4' x 14" vent sells for \$25.60; a 2' x 14" for \$17. A fixed window frame for a stock size ($45\frac{1}{2}$ " x $25\frac{1}{2}$ " double glazing unit costs \$8.50 (un-glazed), and \$23 for an operating sash for a double light $42\frac{1}{2}$ " x $22\frac{1}{2}$ ". Units also may be purchased for single glazing. The sub-sill sells for 50¢ per lin. ft. and the trim for 12¢. In all, outside walls for a 1,000 sq. ft. house would cost, sans glass, less than \$1,000.

Manufacturer: Solar Air Flo, Inc., Elkhart, Ind.

continued on p. 188



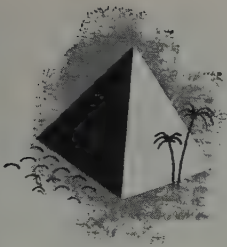
Scale models of Solar-Air Flo's new Totem wood frame building units make it easy to work out various elevations. Totem sections are adaptable to almost any climate since they may be used with different proportions of glazing and come with fiberboard insulating cores.



Two men can erect the exterior walls for an entire house in two days. The only tools they have to use are hammers and screw drivers.



The popular "panel window" is just one of the countless groupings possible with the modular window, ventilating, and wall units.



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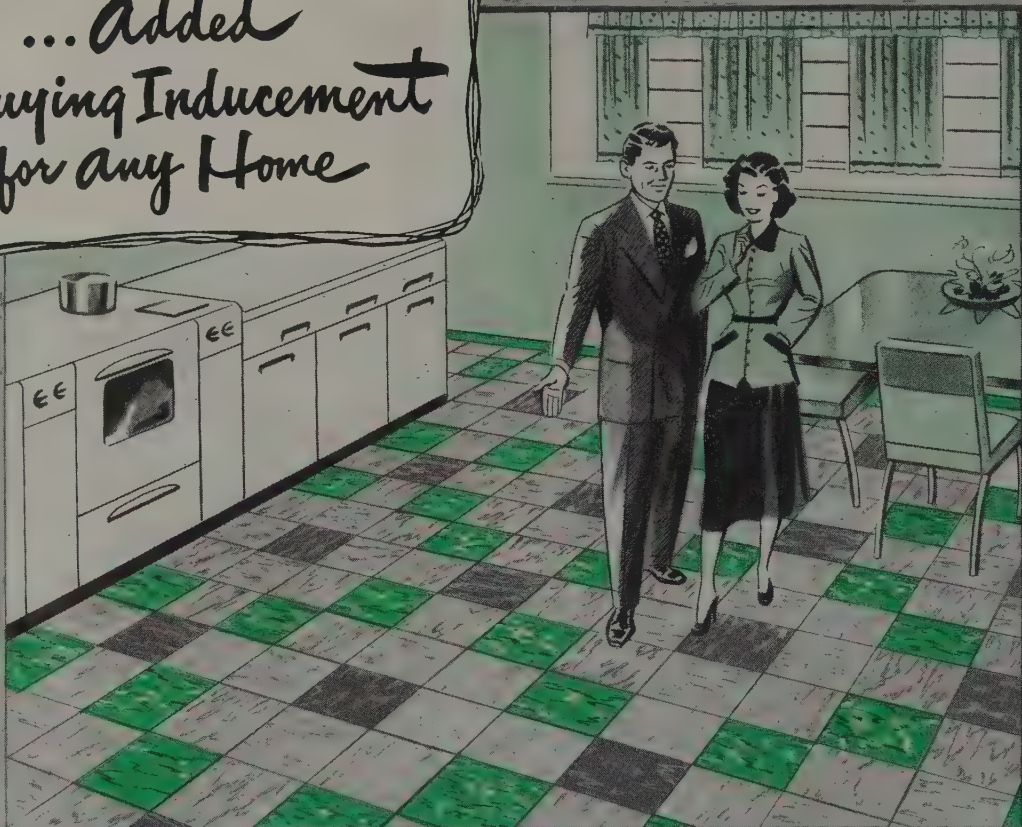
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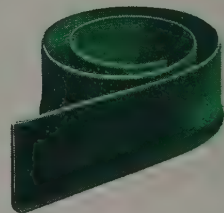
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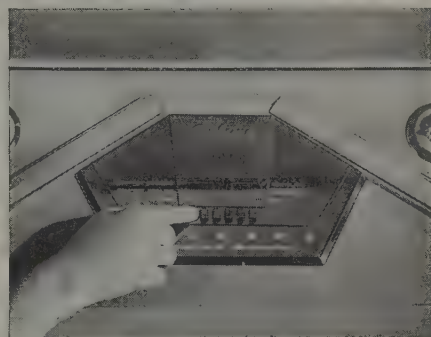


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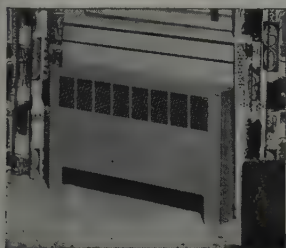


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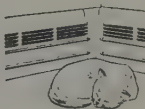


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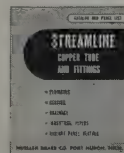
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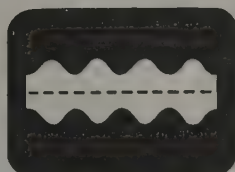
the difference between success and failure of a modern housing development is often in the designer's ability to make the most of limited space allotments. Architect Donald Kromer, Parma Heights, Ohio, uses "Modernfold" doors on all interior openings to achieve an award-winning design for builders Maurice J. Fishman and Fred H. Kromer in their nationally acclaimed Ridgewood Park homes. View here is from the nursery of the Norman Shibley home looking into the hall. Note how "Modernfold" doors leave every inch of floor and wall space available for living.



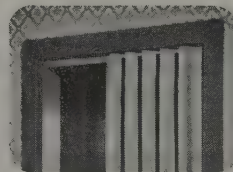
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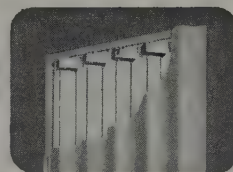
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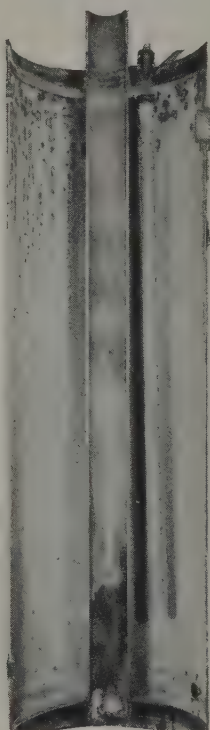
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(A. O. Smith's Four Basic Improvements)

1. Glass-surfaced steel tank can't rust because *glass can't rust!*
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4. "Neutrolizer" . . . the anti-corrosion stand-by protector!

COST NO MORE than ordinary water heaters

For complete information, write A. O. Smith Corporation, *Permaglas*-Heating Division, Dept. HH-353, Kankakee, Ill. International Division: Milwaukee, Wis. In Canada: John Inglis Co., Ltd.

Manufacturers also of A.O. Smith
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Every new Gunnison Home is equipped with a *Permaglas*, "can't rust" water heater.



A.O. Smith

PERMAGLAS-HEATING PRODUCTS



Available in all sizes from 20- to 80-gallon capacity in gas and electric types, AGA and UL Approved.

Look! ...twice as weathertight
with only 1/10th the lifting effort!



... cozy and snug indoors when wintry winds blow outside!



Easy, quiet, smooth finger-tip operation!

BILT-WELL SUPERIOR UNIT WINDOWS

Bilt-Well Superior Windows give Home-owners **twice** the protection against air-leakage as set forth in *AWWI's specification. Impartial tests bear out this point!

Its superiority is, of course, a patented feature . . . the exclusive jamb-liner . . . facilitates snug-fitting at all times . . . also insures **finger tip lift**. "Superiors" are counter-balanced with overhead spring balances, guaranteed to last the life of the building. "Superiors" require

only one-tenth (1/10) the lifting effort of most other windows.

And that's not all . . . "Superiors" are made of kiln-dried Ponderosa Pine—and as you know wood is by far the **best natural insulation**. Add the fact that "Superiors" are water-repellent preservative treated in strict accordance with *NWMA standards, the result . . . the outstanding weathertight window that will last a lifetime!

ACT NOW . . . specify Bilt-Well Superior Windows on your next job and every job thereafter!

*American Wood Window Institute
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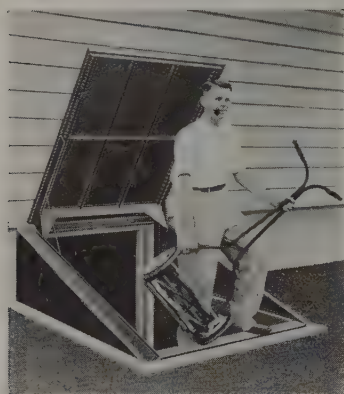


See Our Catalogs 16-Ca and 23b-Ca
in Sweet's 1953 File

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Superior Unit Wood Windows • Clos-Tite Casements • Nu-Style & Multiple-Use Cabinets • Carr-dor Garage Doors • Combination Doors • Screens & Storm Sash • Basement Unit Windows • Shutters • Exterior Doors • Interior Doors • Entrances Louvers & Gable Sash • Corner China Cabinets • Ironing Board Cabinets • Mantels • Telephone Cabinets • Stair Parts

New Service Entry for Modern Basements!



Modern Service-way makes basement more useful...storage convenient. Saves hundreds of steps. Simplifies dozens of household jobs.



Functional design... Blends with any style architecture. Most useful door in the home.

Finger-tip control... Special double action springs counter-balance weight of door.



Saves steps on wash day. Clothes can be carried direct from laundry to clothesline, fewer stairs to climb.

Ready to install... The Service-way is completely assembled at the factory to save time and labor on the job.

SERVICE-WAY provides easy, direct access from outdoors!

The new Heatilator* Service-way is one of the most desirable convenience features you can add to modern homes. This improved service entry makes it easy to get things in and out of the basement quickly, without going through the house.

The Service-way makes basements convenient for storage. Lawn-mowers, garden tools, bicycles, screens and storm windows can be kept in basement...easily taken in and out when needed.

Extra-wide Service-way opening permits installation of bulky equipment. Plenty of clearance for freezers, pingpong tables, hobby shop equipment, etc.

The Service-way is made of heavy-gauge steel, structurally reinforced. Overlapping flanges assure snug fit—keep out rain, snow and wind. Slide bolts lock door securely from inside.

The Service-way adds to property values...worth many times its moderate cost. See it right away at leading lumber and building supply dealers. Made by the makers of famous Heatilator Fireplace. Mail coupon today for folder and specifications on the new Service-way.

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Address _____
☐ Architect ☐ Builder ☐ Dealer
City _____ Zone _____ State _____

THE FICKETT FORMULA *continued from p. 139*

8. Supervision of model homes—Fickett directs the decor and furnishing of the model houses in conjunction with an interior decorator and furnishings store. He also brings in a landscape architect, when needed, and works with him; and he arranges for display water color renderings of each house type for the walls of the sales office.

9. Research—In addition, Fickett's builder-clients profit considerably from his constant research into inexpensive new materials and methods. Among the eye-catching items he has unearthed for Hommes: decorative and cheap wallboards from Japan and Mexico, translucent screens, a little-known cedar-chip wallboard—all of which have helped the appearance and sales of his houses.

What price design?

A higher level of design obviously has to come at a slightly higher price than "\$10 a plan," because of the time required for its preparation. The figures below show how sizable Fickett's fees are—yet how small a percentage they are of the total investment in each tract.

On Sherman Park, for example, two of his design staff, with Fickett supervising, worked a total of 60 days on paper and on scale models to develop and engineer designs for 20 different floor plans, from which Builder Hommes picked six for production. The fee: \$3,500 flat retainer to develop the final drawings, plus a royalty of \$35 per house built—a total of \$16,450 by the time the first 370 houses had been built. The contract actually signed specified \$20,000 as an over-all payment for architectural services on the tract, which will contain 1,000 houses on completion. Architect and builder agreed that these plans could not be used again elsewhere unless by mutual consent.

Fees on other tracts: for Mac-Bright Co., builders, \$75 per house on 160 houses in La Habra, Calif. (which the lender said added \$1,000 to their salability (H&H, Jan. '52).

Sherman Park has won Fickett commissions for four new builder tracts in the Los Angeles area. For

Julius Shulman



Another Fickett tract: Suncrest Park, in Los Angeles' Wilmington district. Priced at \$6,995 with carports, 5,000-8,000 sq. ft. lots, paved streets, all 429 houses sold out in three week ends. Builder: Volk-McLain.

one he is designing 85 houses similar in character to Sherman Park at a flat fee of \$5,000 plus \$35 per house. Total fee: \$8,000. On another 120-house development, he is charging \$650 each for four basic plans —\$2,600—plus \$30 per house. Total fee: \$6,200.

And he has just signed another contract with Ray Hommes to design, as a package, 1,000 houses and lots in the \$7,000 class to meet a market they believe is shifting to the low-cost brackets. Fee schedule: \$8,000 retainer for research, working drawings and site planning; \$50 per house royalty for the first 500 houses; \$25 per house for the second group of 500. Total fee: \$45,500.

Fickett: "I have always felt that the architect should not expect to clear a profit on the preparation of drawings, but derive all his profit from royalties obtained each time the house is repeated."

One-man crusade

Convinced that better design has a demonstrable cash value, Fickett has led the local fight for more complete and better-paid architectural services. At one local meeting of Los Angeles' Joint AIA-NAHB Committee (of which he is AIA chairman), he made an effort to see how many builders were building a better-than-average house, or attempting other than the normal grid site plan. "I found to my surprise," he reports, "not a single house or site plan of any real merit. Are these men just talking the language . . . is all of our time spent in phony 'peace talks' or are builders, architects, engineers, bankers and the rest ready to work together for a better product?"

The builders want local architects to standardize on a flat fee of \$30 per house plan. Fickett junked the gobbledygook of the architects' recommendations and translated it into dollars-and-cents language. Here are his recommendations for:

1953 standard fees

For floor plan, foundation plan, alternate elevations as required by builder (with a maximum of three), interior elevations, all details and any other drawings necessary to a complete and self-explanatory set:

Each basic house type (max.: 1,500 sq. ft.) . . .	\$750
Royalty per house, for houses Nos. 1-50	100
51-100	75
101-200	50
201-1,000	35
over 1,000	25

"In the last three years," says Fickett, "the one worthwhile thing we have accomplished as a committee is helping convince the local FHA and VA to consider revising portions of their codes to meet low-cost building problems and local conditions.

"Specifically, VA and FHA have agreed to: 1) use of concrete pads to take concentrated roof loads, eliminating interior bearing footings; 2) use of extruded metal trim in lieu of interior wood casing; 3) higher stresses than normally permitted in Minimum Property Requirements, provided the architect and builder show calculations for each specific condition, whether it be foundation or structural frame.

"We have also sold them on the idea of contemporary design, the role of the architect in merchant building, and higher commitments which reflect the use of good architectural services."

Protect yourself against Fireplace grief!

Heatilator unit assures correct fireplace operation, won't smoke!

No complaints when you specify a Heatilator* Fireplace. It eliminates common causes of smoking because correct design is *built into* the heavy steel form.

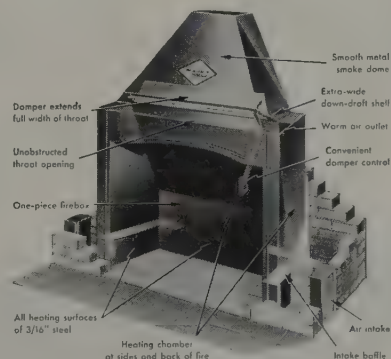
The Heatilator Fireplace is a complete unit, from floor to chimney flue, including scientifically designed firebox, throat, down-draft shelf, damper and smoke dome. Comes ready to install. Simplifies and standardizes fireplace construction, protecting you against rule-of-thumb building methods.

Circulates heat throughout room instead of wasting it up the chimney. Takes cold air from floor level, heats it, and circulates it to warm all the room. Saves fuel by making furnace fires unnecessary on Spring and Fall days. In warm climates it often provides all the heat needed.

Offer your clients this valuable extra feature at low cost. Specify a Heatilator Fireplace. Proved in 26 years use, it's America's leading Fireplace. Mail coupon for A.I.A. folder and specifications.



The Heatilator Unit puts no limit on mantel design or use of materials, allows complete freedom of architectural expression. A "must" for summer camps and cottages. Makes them usable earlier in the spring, later in the fall.



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Address ☐ Architect ☐ Builder ☐ Dealer

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No nails to treat

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F I R E P R O O F G Y P S U M W A L L B O A R D



Plain Panel SHEETROCK

Can be finished in dozens of ways: paint, wallpaper, textures, grass cloth are just a few exciting ideas.



Prefinished Knotty Pine Panel

When walls are up the decorating's done, too—providing the interest and beauty of real wood paneling.



Neutraltone Striated Panel

Subtle surface scorings help create the effect of straight-grain wood paneling—at only a fraction of the cost.

The greatest advance in Gypsum Dry-Wall since U.S.G. invented SHEETROCK in 1917!

All the famous SHEETROCK advantages, plus: light weight, easy handling, fast erection, smart modern effects.

Only 16" wide, an 8' panel weighs but 16 lbs. Easy to maneuver around corners, in narrow places—simplifies finishing hard-to-get-at

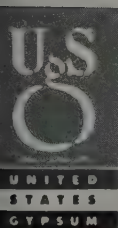
attic and basement spaces. Available in 8', 9' and 10' lengths; $\frac{3}{8}$ " thick; 4 pieces per bundle.

Ask your building supplies dealer about this revolutionary gypsum dry-wall development. Another first from U.S.G. research, it's sure to be a big business builder for you!

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REVIEWS

IDEA 53. International Design Annual. Edited by Gerd Hatje, with contributions by Max Bill (Zurich), Arthur Hald (Stockholm), Heinz Löffelhardt (Stuttgart), Paul Reilly (London), Alberto Rosselli (Milan), Sven Erik Skawonius (Stockholm), and Herwin Schaefer (Newton Center, Mass.). Wittenborn, Schultz, Inc., 38 57th St., New York 22, N. Y. 129 pp. 8½" x 11½". Illus. \$8.50

NEW FURNITURE. Edited by Gerd Hatje. Wittenborn, Schultz, Inc., 38 E. 57th St., New York 22, N. Y. 132 pp. 8½" x 11½". Illus. \$8.50

Idea 53 is the first volume of a proposed series of annual publications that will illustrate the best industrial design to be found anywhere in the world. The choice for this edition (which was beautifully laid out and printed in Western Germany) was made by a panel of designers and design critics from England, Germany, Italy and the US. To most readers on this side of the Atlantic, their selection will look like one of those exquisite exhibitions of "useful objects" with which the American public has long been familiar. And like these exhibitions, the book raises a number of questions that always come up whenever a body of critics selects the "best" design of the year.

Here are the questions:

1. Who chooses the critics, and what is their point of view?
2. Is their choice of the "best" based upon performance characteristics or esthetics, or both? If based upon performance, who tests the objects selected? And if based upon esthetics, whose esthetics?
3. Does it make sense to pick the "best" typewriter, say, of 1952, if there is a much better typewriter that was designed in 1951? Isn't this a little like saying that "this is the first time this sort of thing has been done by a clergyman on a Friday in Dover"?

It will be interesting, in this connection, to see how the editors will cope with *Idea 54*, for in *Idea 53* they have drawn upon material designed more than a year ago.

4. Is it necessary to include almost every category of design, as this book does? Isn't the result that you may get, in one category (wooden bowls, for example), an exceedingly high standard of design, whereas in another category (household appliances, for example) your standard is very low indeed? In other words, is it necessary to select the best object in every category (even if a given category has been invaded by the teardrop school of jazz design), rather than just pick the categories that have something significant to offer?

5. But if you do accept the notion of showing the "best" object in nearly every category of design (as this book does) are you then justified in excluding such major categories as

continued on p. 178

new! exclusive!

CECO-STERLING

3 in 1
ALUMINUM WINDOW

■ In the hard selling, competitive days ahead "quality built" homes will sell faster. . . keep your speculative inventory low.

And there's no better way to prove quality than to build with wanted features.

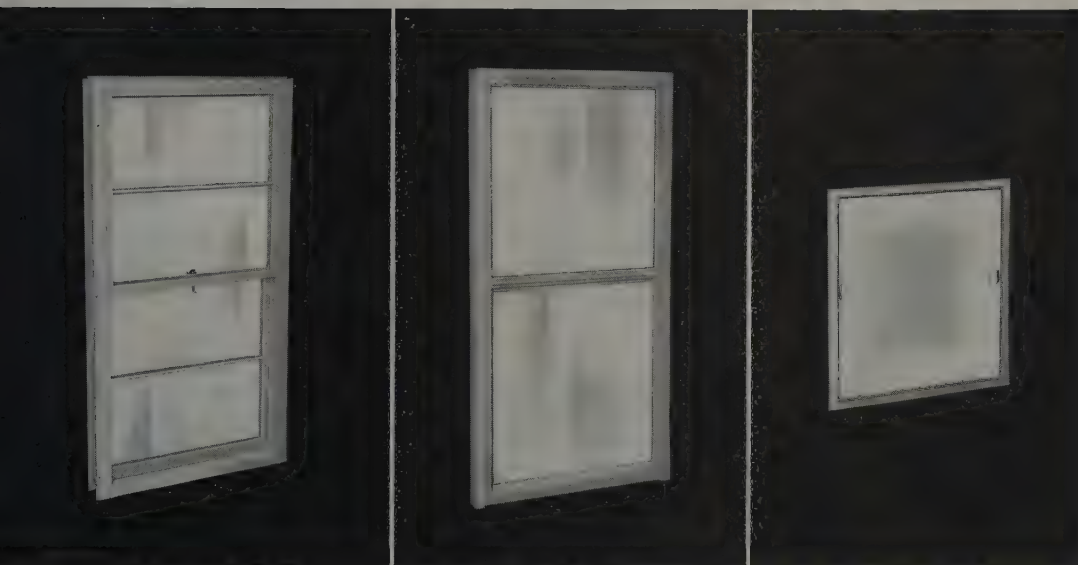
To meet this more demanding market we at Ceco have developed a new product that says quality at a glance—it's the new Ceco-Sterling

3 in 1 Aluminum Window.

Here is something every homeowner will want on sight . . . a window unit that takes all the work out of summer screening and winter storm windowing . . . self-storing screens and storm windows do the trick . . . changing is a mere matter of raising and lowering from the inside . . . there are no ladders to climb.

Here's a window that's brilliantly handsome . . . will complement any architecture . . . will outlast any home . . . costs nothing to maintain. Advanced Engineering puts it ahead of the field.

Sounds too good to be true, doesn't it? But you can count on it because the Ceco-Sterling **3 in 1** Aluminum Window is all we claim. We back it with a guarantee of satisfaction. **CECO**



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General offices: 5601 West 26th Street, Chicago 50, Illinois

Why Home Owners and Builders Will Prefer the Ceco-Sterling 3 in 1 Window

1. The Ceco-Sterling **3 in 1** Window is the *strongest* Prime Window with sash balances and stainless steel weather stripping plus combination screen and storm panels offered as a unit.
2. Exclusive permanent weather seal, nothing make-shift, nothing to deteriorate, wear out or replace. No window can match it in preventing air and cold infiltration.
3. Self-storing storm window and screen changed as easy as raising an arm.
4. Easy to install . . . no fitting or trimming of Prime Window . . . anchoring hardware comes with the unit.
5. Built as a unit . . . sold as a unit with price including all hardware, sash balances, lock, pull down, screws, closures, channels and weather seal.
6. All welded frame and sash in the Prime Window.

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Known to Millions
of Your Best Building Prospects
Through the Powerful Pages
of BETTER HOMES & GARDENS
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Yes, your *best* building prospects—over 5 million of them—are reading regularly about dependable, economical **DETROIT** Heating Controls in two of America's top advertising mediums—Better Homes & Gardens and Time magazine! These are people who have the means to buy and who know, look for and buy better things. That's why they'll want **DETROIT** Controls. And that's why you can make your houses easier to sell, more comfortable to live in by specifying **DETROIT** Controls throughout. Remember, only **DETROIT** gives you the exclusive *Timed Cycling* thermostat—the “thermostat with a brain” that controls temperature to a fraction of a degree, eliminating over and under heating. So why not cash in on this overwhelming product superiority and the powerful advertising support that goes with it. Always be sure to specify **DETROIT** Controls!

If you're not already familiar with the **DETROIT** Timed Cycling Thermostat write today for Form No. 1545-A.

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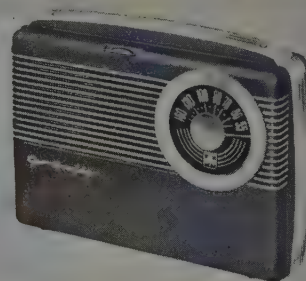


REVIEWS *continued*

automobiles or airplanes (seeing that they are frequently much better designed than the radios, etc., which you do include)?



One standard for bowls . . .



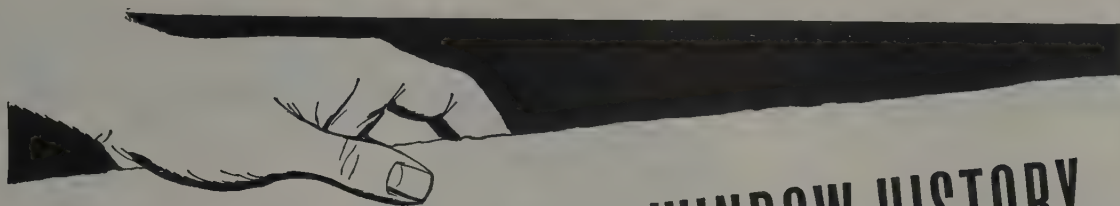
. . . another for radios

These questions are not posed here in an effort to discourage exhibitions of useful objects or publications on useful objects such as the present one. These exhibitions and publications—especially when prepared as well as this one—have served to raise the standards of public taste and to increase public acceptance of good modern design immeasurably. But the trouble is that a large segment of the public now stands in such awe of the critics' choices that it seems only fair to point out that the critics are often uncritical, their standards are often uneven and their choices vary from year to year.

Since furniture is such a tremendously large design category in itself, the editors and publishers of *Idea 53* have published a second book devoted exclusively to *New Furniture*. This book is just as handsome as the volume on industrial design. It raises similar questions, though not to the same degree, for this volume seems less concerned with the furniture production of any given year.

New Furniture, however, does raise some exceedingly serious questions so far as designers and their rights are concerned. Let's be perfectly frank about this: just about every professional except the architect and the designer is protected by elaborate legislation, and so is

continued on p. 180



BIGGEST NEWS IN WOOD WINDOW HISTORY

...New, U. S. Approved Commercial Standard!

Many windows of Ponderosa Pine, as made by various manufacturers, have established outstanding records of performance and endurance. But today there's even greater assurance of quality and value—the new commercial standard (CS 190-53) for stock double-hung wood window units, approved by the Commodities Standards Division, U. S. Department of Commerce! Here are some of the quality features you'll find in Ponderosa Pine windows manufactured in accordance with this standard:

PRESERVATIVE WATER-REPELLENT TREATMENT!

All wood parts are water-repellent preservative treated after cutting, in accordance with the NWMA

minimum standards which require an average penetration of the end grain of $1\frac{1}{2}$ inches.

EFFICIENT WEATHER-STRIPPING!

All units are weather-stripped to allow a predetermined minimum of air infiltration. That means real protection from heat, cold and dust.

EASY OPERATION!

Units have balances permitting easy operation of both sash upward and downward, capable of holding either sash stationary in any position. Balances may be spring, spiral, pulley and cord or pressure weather-strip.

QUALITY GLAZING!

All glass in $1\frac{3}{8}$ -inch sash is bedded in putty or glazing compound or, in lieu thereof, putty glaze using a secondary putty rabbet on reverse side. All windows are face puttied.

*PLUS...

Quality standards specifying grade of lumber used—thickness of lumber, nailing of joints, and many other construction advantages.

For complete information about the new Commercial Standard, write

Ponderosa Pine

WOODWORK

38 South Dearborn Street
Chicago 3, Illinois

AWWI Seal Products
Meet New Standard



The American Wood Window Institute Seal of Approval appearing on double-hung wood windows means that the wood window unit that bears it equals or exceeds the new U. S. approved Commercial Standard in all respects.



the foundation is Figurework

*and the Remington Rand
Printing Calculator is first
for accurate figuring.*

Architects, builders and contractors appreciate the importance of a good figurework foundation. That's why so many prefer the Remington Rand Printing Calculator for fast, accurate figuring from start to finish on every job.

Before a plan is drawn or an estimate submitted, the Printing Calculator's 10-key touch controlled keyboard takes a hand at figuring. Automatic division, short-cut multiplication, split-second addition and subtraction are accurately yours... with every calculation proved on the printed tape.

Send for your free copy of the new folder, "Figure-Fact Efficiency For Contractors and Builders". It shows many practical uses of the Remington Rand Printing Calculator, from estimating cellar wall area to computing your payroll. Mail the coupon today.

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Room 2688, 315 Fourth Avenue,
New York 10, N. Y.

Please send me my free copy of
"Figure-Fact Efficiency For Contrac-
tors and Builders", (AD 535 Rev. 1).

Name _____ Title _____

Company _____

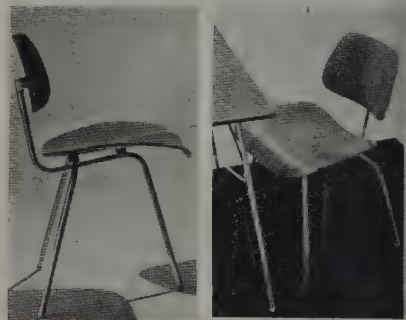
Address _____

City _____ Zone _____ State _____

REVIEWS *continued*

just about every other artist. Books, songs and trademarks can be copyrighted and such copyrights can be made to stick; but architects and designers may be copied freely and there is very little they can do about it.

Take this book, for example: a rapid count discloses at least 11 designs (credited to other men) which were, to put it much too politely, strongly influenced by the revolutionary molded plywood chair designed by Charles Eames. But the book lists no dates with the



Which came first—the Eiermann or the Eames?

designs, and illustrates Mr. Eames's original contribution well after his imitators' have been shown. The result is that an uninitiated reader would think that it was Mr. Eames who was copying Mr. Eiermann (Germany), for example, rather than vice versa.

Take another case: there are innumerable illustrations in this book showing almost direct copies of original designs by such men as Alvar Aalto, Marcel Breuer and Le Corbusier (Mies van der Rohe is represented by one picture of the Barcelona chair); yet, there are no pictures of early Aalto bentwood chairs, no pictures of Breuer's tubular steel and plywood furniture, no pictures of Le Corbusier's chairs, and tables and cabinets, no pictures of Mies van der Rohe's tables and cabinets. After all, these men are still alive and kicking; is it not the function of a serious work on modern furniture—and, especially, of as good a book as this one—to point out, for example, that current Thonet chairs are almost direct copies of Breuer's designs for the same firm done in 1928; that Mies van der Rohe did some tables almost 30 years ago that were very much like (but somewhat better than) some tables being made by certain US manufacturers today? There is no stigma attached to the fact that many of the younger designers are trying to improve upon an earlier, pioneer design; but if they merely copy it and help "merchandise" it, then that should be stated clearly in a book of this sort.

After all, every movie is prefaced with a credit line to the original author of the plot. Is it asking too much to have contemporary designers show the same respect for those who inspired them?

continued on p. 184

A Guide to Selecting the Right Floor

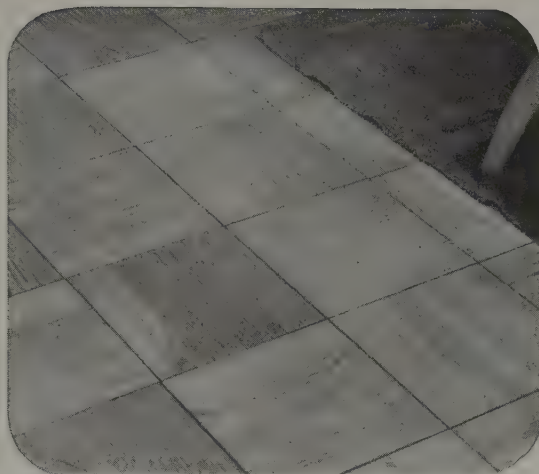
KNOW THE SPECIFIC USES OF THE DIFFERENT TYPES OF BRUCE BLOCKS

You are likely familiar with the modern beauty and lifetime durability of Bruce Block Hardwood Floors. There are now four distinct types, each developed for a specific purpose. In addition to those described here, Bruce also makes a heavy-duty industrial block for installation over concrete. Write us for literature on Bruce Block Floors or for advice on unusual floor problems.

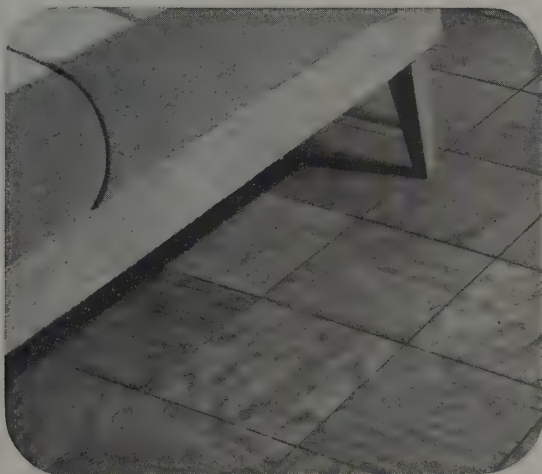
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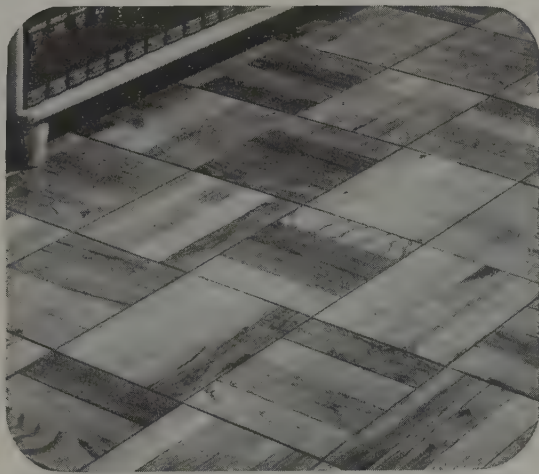
*See our Catalog
in Sweet's File*



SOLID OAK—Over 100 million feet of this original Bruce Unit-Wood Block have been used in homes, apartments and other areas. It can be nailed over wood subfloor or old wood floors, or laid in mastic over concrete slab. Blocks 1/2" or 25/32" thick) have individual slats with interlocking tongues and grooves. Prefinished or unfinished.



LAMINATED OAK—For use over concrete, this laminated 3-ply oak block gives maximum stability and moisture resistance. No membrane-waterproofing is required unless hydrostatic pressure exists. No expansion spaces or joints needed. Bruce Laminated Oak Blocks can be used over radiant heat. Thickness: 1/2". Prefinished.



BLENDWOOD—This is a new, economy priced Bruce Unit-Wood Block of selected mixed hardwoods. Installed in mastic over concrete, it produces a modern floor of unusual grain and coloring. Bruce Blendwood Blocks are one of the most durable of all floorings, being made of heavy hardwoods, 25/32" thick. Prefinished.

BRUCE BLOCK HARDWOOD FLOORS

Bruce also makes Strip and Plank Floors



Here is the doorway opposite but with a panel of regular single glaze glass. With a random clear glass block panel, prying eyes cannot see inside.



By night, the entranceway glows with a light that radiates welcome to friends. By day, inside rooms are flooded with natural daylight.

This random clear panel retains all of the doorway's colonial charm. The subtle variation in the block face is reminiscent of old handmade glass.



GLASS BLOCK "GOES" WITH ANY ARCHITECTURE

WHETHER A HOME is traditional or modern, it can have the advantages of Insulux Glass Block®. Block patterns are available in a wide variety of face designs that "go" with any architectural design.

What other material offers you the opportunities to create such interesting, new architectural effects that are so decorative . . . so useful . . . yet so practical?

For information, write to Insulux Glass Block Division, Kimble Glass Company, Dept. MB-3, Box 1035, Toledo 1, Ohio.

KIMBLE GLASS COMPANY

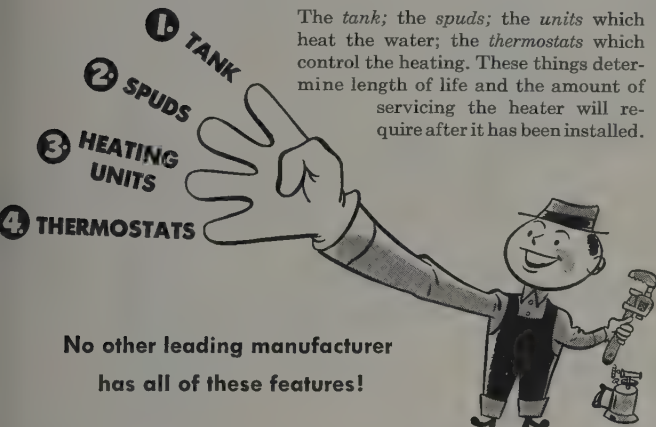
Toledo 1, Ohio

Subsidiary of Owens-Illinois Glass Company



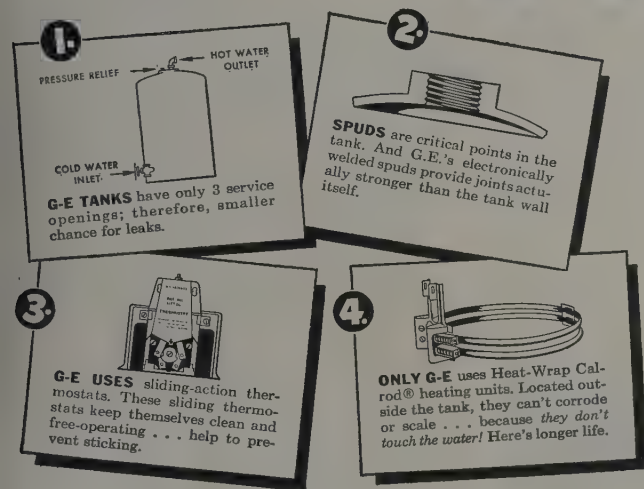
4 big reasons why you can install a General Electric Water Heater and forget it!

In any electric water heater, there are 4 important construction features:



The *tank*; the *spuds*; the *units* which heat the water; the *thermostats* which control the heating. These things determine length of life and the amount of servicing the heater will require after it has been installed.

No other leading manufacturer has all of these features!



Here's faster, easier installation for you!

G.E.'s new table-top model is *top-connecting*! . . . takes all the backache out of installation! You install it without bending or stooping. Saves you time, saves your back . . . and you offer customers a lower-than-ever installation price.

IT ALL ADDS UP TO THIS—

When prospects come hunting, you can offer them longer life with an efficient, economical, better-built G-E Water Heater. Give them a G-E *plus* the satisfaction of knowing their hot water problems are over.



or the best in water heaters . . . call your G-E wholesale distributor!

GENERAL ELECTRIC

MORE LIVING SPACE

Compact designs, 22" x 22" and up, top flue outlets, front accessibility to all parts, close clearances — mean more living space in smaller homes.

GREATER BEAUTY

Gleaming white baked enamel finish, streamlined design, match the smart, clean beauty of other utility room appliances.

FAST INSTALLATION

Factory assembled, factory wired, fire-tested, for quick installation, meeting today's high speed, streamlined erection schedules.

YEAR 'ROUND COMFORT

Soon year 'round airconditioning will be available in a smart Ranchief "4-Seasons" unit — compact, beautiful, efficient.

DEPENDABILITY

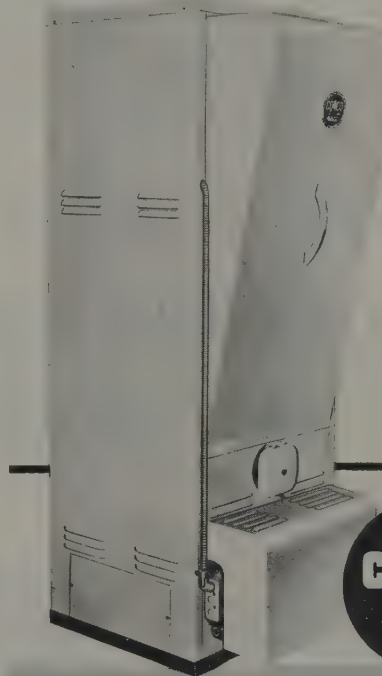
Finest quality in the merchant built price range assures trouble-free performance, fuel economy, complete satisfaction for your home buyers.

SALABILITY

The compactness, the quality "look" of Conco-Ranchiefs helps sell your homes.



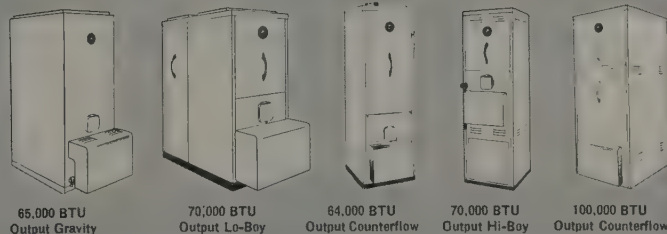
keeping pace with today's home design



There's a Conco Ranchief for every size home, every home design — slab floor, crawl space, basement — perimeter and conventional heating, ideal for small pipe installation. Write for complete information.

New 70,000 BTU output Counterflow features over-size blower for perimeter systems with long duct runs.

CONCO heat Ranchief
Town & Country



65,000 BTU Output Gravity

70,000 BTU Output Lo-Boy

64,000 BTU Output Counterflow

70,000 BTU Output Hi-Boy

100,000 BTU Output Counterflow

CONCO ENGINEERING WORKS
Division of H. D. Conkey & Company—Mendota, Illinois

CHICAGO OFFICE:

111 W. WASHINGTON ST. • PHONE-FR 2-7955

AFFILIATES:

Conco Building Products, Inc.
Brick, Tile, Stone

Conco Materials Handling Division
Cranes, Hoists

How builder Herbert Gold adds "SELL" to his homes...



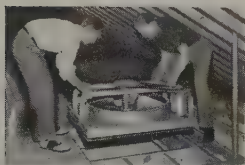
"I find people today are most receptive to those things which add greatly to their home living comfort. Robbins & Myers Attic Fans are a 'must' in homes where better living is desired."

Herbert Gold, President
Malverne Acres, Inc.
West Hempstead, N. Y.

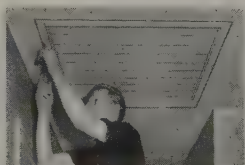
You too can sell more homes by using Mr. Gold's strategy! Build your sales talk right into each home by installing an R & M "Package" Attic Fan. It's a complete, dependable home-cooling system. On hot summer days and nights it drives out hot, humid air... pulls in fresh, cooling breezes. An R & M Attic Fan is the extra value, the extra comfort today's home-buyer demands. It means years of cool summer comfort. And for the "sell" it adds, its cost is low indeed!

Fits low attics and all standard hallways. The smallest unit needs only 16" of attic clearance; the largest but 18". Perfect for "moderns" with limited attic clearance. Quiet, too. Moving parts are rubber-mounted, sound-insulated. Fan and motor have factory-lubricated, sealed ball bearings. Fan guaranteed five years; motor and shutter, one year. Certified air deliveries are 5000 and 7000 CFM. 10500 and 16000 CFM sizes are also available. Send the coupon for details.

See How Easily You Install Low-Cost R & M "Package" Attic Fans!



No other attic fan can be installed as quickly and cheaply! Fan simply sets over roughly framed opening.



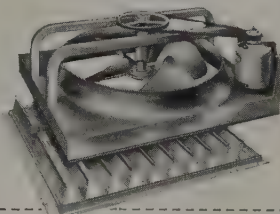
Complete automatic shutter unit fastens with screws to ceiling opening frame; flange forms ceiling trim.



R & M Attic Louvers are specially sized to provide proper exhaust for each of the 4 R & M "Package" Fans.

No Extras Needed. No bolts, screws, ceiling grille, trap door or vent box. Fan simply sets over ceiling opening; requires no springs or canvas connection.

Everything you need arrives on the job in a complete package. Priced from \$139.95* retail, including automatic ceiling shutter.

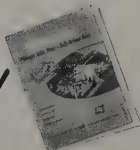


ROBBINS & MYERS

"Package" attic fans

*Prices subject to change without notice.

IT'S FREE!



Robbins & Myers, Inc., Fan Division HH-33
387 S. Front St., Memphis 2, Tenn.
Please send me your booklet, "Robbins & Myers Package Attic Fans, Belt-Driven Fans A.I.A. File No. 30-D-1."

Name _____
Address _____
City _____ Zone _____ State _____

REVIEWS continued

ARCHITECTURAL DETAILING. By Caleb Hornbostel and Elmer A. Bennett. Reinhold Publishing Corp., 330 W. 42nd St., New York, N. Y. 221 pp. 9" x 12". Illus. \$12

This is an extremely well-presented and well-organized reference book that shows the sort of architectural details (165 of them) that you will not find in standard reference manuals. This fact gives the book its principal interest to students of architecture; it also accounts for some of its weaknesses.

It is probably fair to say that you can tell a good architect by the detailing that goes into his buildings. His detailing is just as much the architect's personal handwriting as his plans, facades and ideas about space, volume and mass. In fact, after the first impact of a building upon the onlooker has worn off, it is the detail of a railing here or a window mullion there which will continue to arouse interest and testify to the designer's consistency and competence.

Now, this means that the "handwriting" you can find in an architect's details is a very personal thing—just as personal as his real handwriting. A special detail (such as a large sliding wall, for example) is therefore not just a special piece of installation; it becomes a very special design solution in the hands of each individual architect. Nobody knows this better than Architect Richard Neutra, who has written a stimulating foreword to this book, for his own file of stock details is as famous as it is distinctively "Neutra." In other words, it was compiled to fit into a building designed by Richard Neutra; it would never fit into a building designed by Frank Lloyd Wright, say, or by Carl Koch.

The details collected by Messrs. Hornbostel & Bennett are, therefore, fascinating specimens of different people's architectural handwriting. This means that many sensitive and original designers will not find these particular, highly personal details directly applicable to their own work.

This is not to say that there are no universal details in the book; there are. But by and large, the details are special and easily identifiable with one particular designer's way of doing things.

The book is organized in two sections:

First comes a discussion of certain building types (offices, labs, banks, stores, bars, schools, auditoriums, residences and miscellaneous small structures). In each category some fairly typical problems are shown, together with the details used by different architects to solve them.

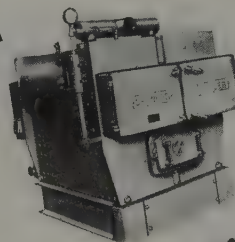
Second is a section on basic details (those relating to sun control, ventilation, lighting, signs, bathrooms, kitchens, stairs, fireplaces, doors and windows). Throughout the book a photograph of the finished job accompanies the detail drawings.

GREATEST ADVANCE IN A DECADE IN COMMERCIAL BOILER DESIGN SPENCER'S LOW-WATERLINE BOILER



Flattened out to solve low-headroom and excavation problems!

Divided into two watertight sections for easier entrance through narrow doorways!



SPENCER

also offers Design Dividends

IN RESIDENTIAL BOILERS!

Unique warp-proof door frames—no gas leakage, since these door frames are precision-ground and extensions of the water walls.

Exclusive peaked fireboxes—clean, smokeless, efficient, because of extra-high combustion chamber.

Special staggered boiler tubes—more rapid water circulation, quicker heat absorption.

Interchangeable base panels—front and rear permit quick installation of brickwork.



"C" SERIES: 9 sizes—from 700 to 3,000 sq. ft., steam. Available with standard or extended beauty jackets and service water coils.

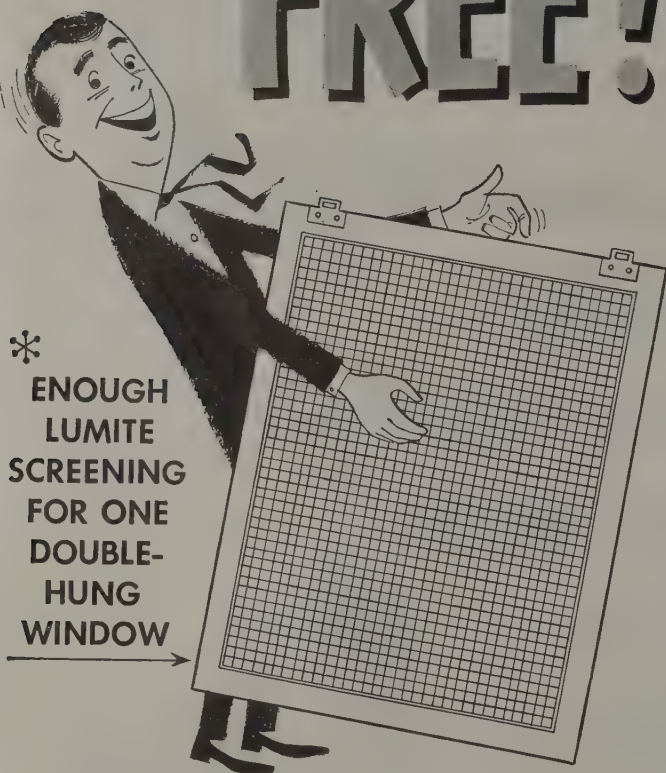
Specify **SPENCER**
...THE QUALITY LINE



"R" SERIES: 6 sizes—from 320 to 1,100 sq. ft., steam. Available with beauty jacket and service water coils.

Won't rust, corrode or stain
and it's

FREE!*



ENOUGH
LUMITE
SCREENING
FOR ONE
DOUBLE-
HUNG
WINDOW

PROVE IT TO YOURSELF! Screen just one standard-size window (2'-0" x 3'-2")—then leave it up all year long. You'll agree Lumite outlasts all other screenings... won't rust, won't corrode.

Send
this coupon
today!

LUMITE

SARAN SCREENING

*Registered trade-mark

LUMITE DIVISION (Dept. HH-3)
CHICOPEE MILLS, INC., 47 Worth St., New York 13, N. Y.

I am a member of the home building industry and am interested in Lumite screening. Please send me enough Lumite to screen one (1) double-hung, standard window, 2'0" x 3'2", and the new specification brochure.

(Please attach this coupon to your business letterhead.)

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Address _____

City _____ State _____

ARCHITECT ☐ BUILDER ☐ CONTRACTOR ☐ SUB-CONTRACTOR ☐

OTHER _____

REPLACEMENT OF A WINDOW OF MONEY
Guaranteed by
Good Housekeeping
NOT AS ADVERTISED THEREIN

NATCCO presents
a complete line! . . .

MODEL 1102FL
GARFIELD



from the **GARFIELD 1102FL**
for the newest home

The Garfield 1102FL is quality plus economy, and is a model with many features. Guaranteed plate glass mirrors, seamless one piece bodies, brush holder, interior night light, lights for make-up and shaving, adjustable shelves—many other features.



MODEL 1000
AMBASSADOR

to the **AMBASSADOR 1000 . . .**
for the distinctive home

The Ambassador 1000 is the quality model that adds a luxury look to any bathroom. It has that extra space and design that better homes and larger families deserve. Extra features include interior night light, shaving and make-up lights, and a chrome plated recessed fixture for soap tray and tumbler holder. It also features a cleansing tissue dispenser, all in one wall opening.

Special Budget Models!

Where low cost installations are necessary—NATCCO offers a complete selection of economy cabinets with quality and features such as piano type hinges, and quality plate or window glass mirrors. Seamless and rust-proofed one piece bodies, tooth brush holders and with or without lights.

Model 1102

Model 802

YOUR COPY is Ready!
Your letterhead will bring you this new catalog on the complete line of NATCCO Cabinets. Call your Supplier for any of these models.



NATIONAL STEEL CABINET CO.
2415 N. Crawford Ave. Chicago 39, Ill.

PRODUCT NEWS from AMERICAN-Standard

A review of products in the news and important features worth remembering



MAYFAIR SUMMER AIR CONDITIONER. This self-contained residential cooling unit mechanically cools and dehumidifies the air... quietly, uniformly, economically. It is designed for easy connection to forced warm air heating system (using same ductwork) to form a year 'round home air conditioning installation.



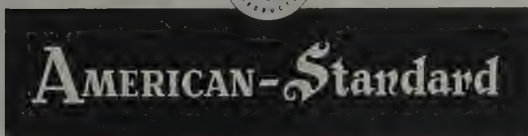
MAGNE-FILTER AIR CLEANER. Designed for easy installation in the return duct of any winter or summer air conditioning system, the Magne-filter is a dry type electronic air filter that traps even the smallest dirt particles, removes pollen, air-borne bacteria, dust and smoke from the air.



NEW DRESSLYN LAVATORY-DRESSING TABLE. This handsome unit is compact, yet spacious. The cabinet is made of moisture-resistant wood finished with enamel; the lavatory is genuine vitreous china... both are available in white and 20 harmonizing color combinations. Counter top and splash back are enameled steel.



AMERICAN-STANDARD DISPOSER. A work-saving partner for famous American-Standard sinks, this quiet-operating disposer is also ideal for modernization as it can be easily fitted in any sink with standard drain opening. Has reversible, double-edged shredders of rustproof chrome steel, and unique safety top control.



American-Standard
Dept. HH-33, Pittsburgh 30, Pa.

Without obligation on my part, please send me your free literature on:

☐ Mayfair Summer Air Conditioner ☐ Magne-filter Air Cleaner
☐ New Dresslyn unit ☐ American-Standard Disposer

Name.....

Address.....

City.....State.....

American Radiator & Standard Sanitary Corporation, Dept. HH-33, Pittsburgh 30, Pa.

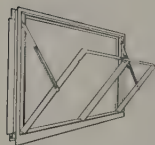
Serving home and industry

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE • DETROIT CONTROLS • KEWANEE BOILERS • ROSS EXCHANGERS

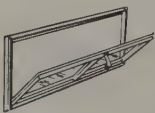
VENTO

THE STEEL WINDOWS OF EXTRA VALUE

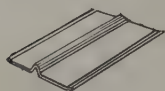
The extra value in Vento Residence Casement Windows includes: all casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame. This provides greater rigidity and stronger ventilators.



NEW IMPROVED VENTO "CHAMPION" BASEMENT WINDOWS give extra value because of their 14-gauge electrically welded frame, fins welded to jamb for quick installation and double contact with leak-proof watershed sill. A plus value incorporates a redesigned latch which assures positive operation under all conditions.



VENTO "THRIFTY" BASEMENT WINDOWS give extra value because they are a real economy window especially designed for lower cost housing. Two position ventilation and easy sash removal. Fin flanges at jambs for quick installation. Three sizes, putty type only.



VENTO FORMED STEEL LINTELS give extra value because they permit the use of standard 8" blocks over door and window openings. Of 10-gauge steel, with stiffening crimp in center. Also formed steel lintels for brick constructions.

Also
Vento "Champion"
Barred Basement
Windows; Vento
"Champion" Utility
and Barn Windows;
Vento "Thrifty"
Utility and Special
Type Windows.

Write us
for full information
and name of
nearest distributor.

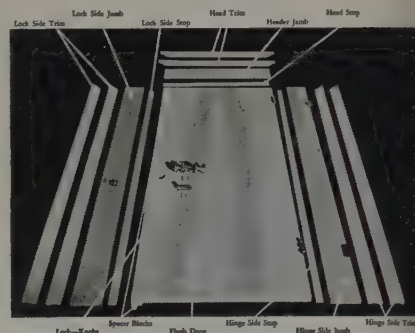
VENTO

STEEL PRODUCTS CO., INC.
256 Colorado Ave., Buffalo 15, N. Y.

NEW PRODUCTS *continued*

FLUSH DOOR comes packaged with precut frame, cuts costly labor time

With only a hammer, level, and nail set, a carpenter can do a precise casing and hanging job on the *Hasko K-D* door unit. Shipped from the factory knocked down, the *K-D* is pre-drilled for the lock-and-lock mechanism (in-

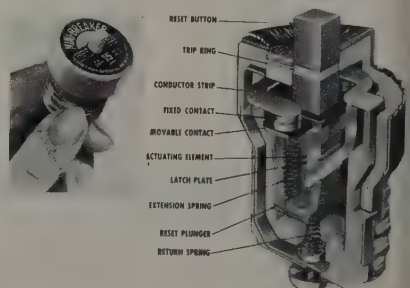


cluded), the jambs are notched for the header, butts are installed on the door and frame, and the trim is mitered. Even shingles for shimming and nails come in the package. The doors are available in six standard sizes ranging from 1'-6" to 3' wide with any of three styles of trim. Prices run from about \$30 to \$35. retail. Standard facings for the flush doors are red oak, Philippine mahogany, and birch; other woods may be obtained on special order. The trim and frame are made of kiln-dried *Ponderosa* pine.

Manufacturer: Haskelite Mfg. Corp., Grand Rapids 2, Mich.

CIRCUIT BREAKER screws into regular fuse box

Many bruising safaris for spare fuses in the dark can be eliminated with the amazing little *Mini-Breaker*. Fitting any standard fuse-holder delivering up to 125-v. AC service, the compact protective device trips a circuit immediately if the overload is a big one, within two minutes if moderate, and in an hour if minor. Once the condition is cleared, pushing the button on top of the breaker will re-establish power service. *Mini-Breaker* is listed by Underwriters

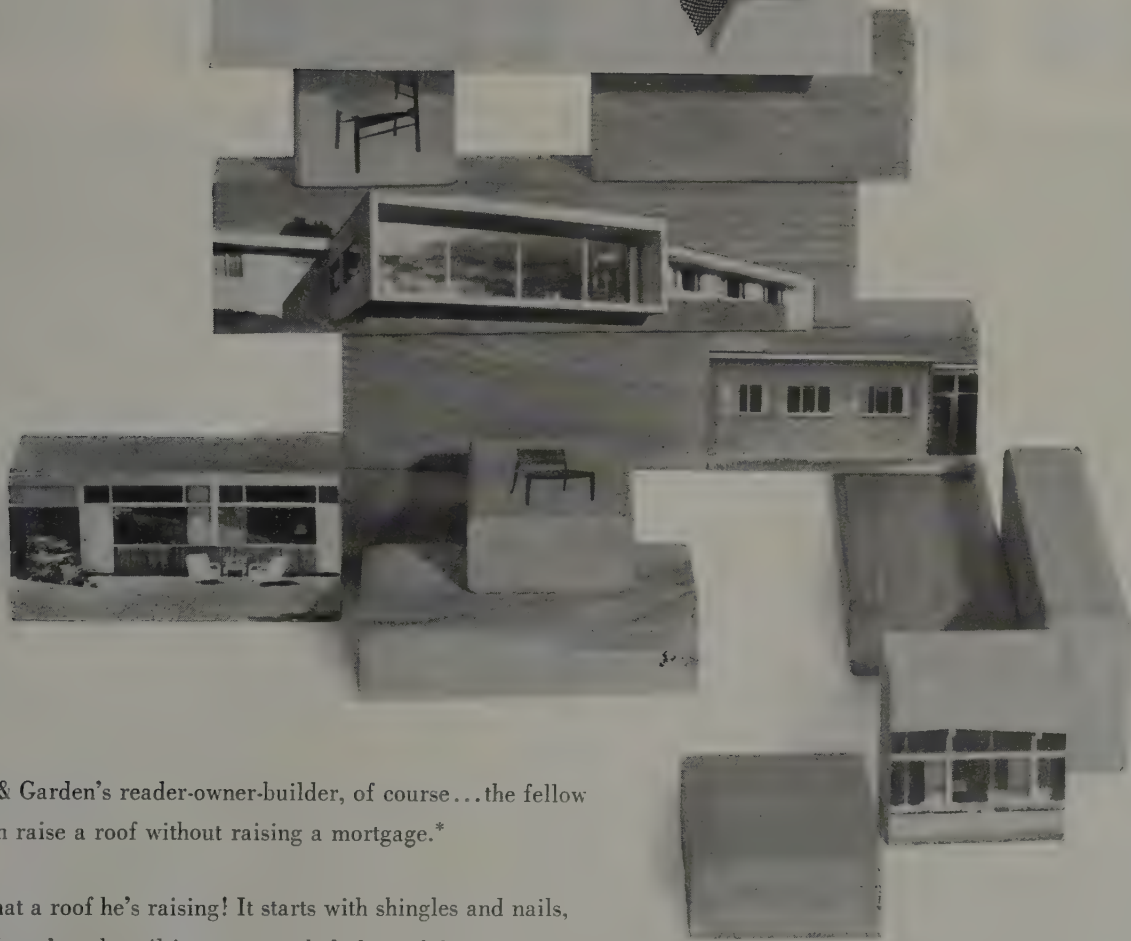
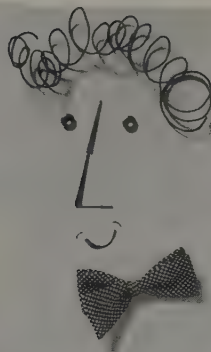


Laboratories and produced in 15, 20 and 30 amp. ratings. Since it never has to be removed from its socket, there is no danger of too generous a fuse being used on an electric line. Price runs about \$1.50 per breaker.

Manufacturer: Mechanical Products, Inc., Jackson, Mich.

continued on p. 192

WHO'S
RAISING
THE
ROOF?



House & Garden's reader-owner-builder, of course...the fellow who can raise a roof without raising a mortgage.*

And what a roof he's raising! It starts with shingles and nails, but it doesn't end until it covers a whole houseful of purchases; plate glass to paint, cement to air conditioning!

From front door to kitchen floor...the owner-builder's house will be the way *he* wants it, custom-built to his family's needs. Make it the way *you* want it by telling your story in House & Garden, where you will reach the customers who have the means and the power to specify *your* product.

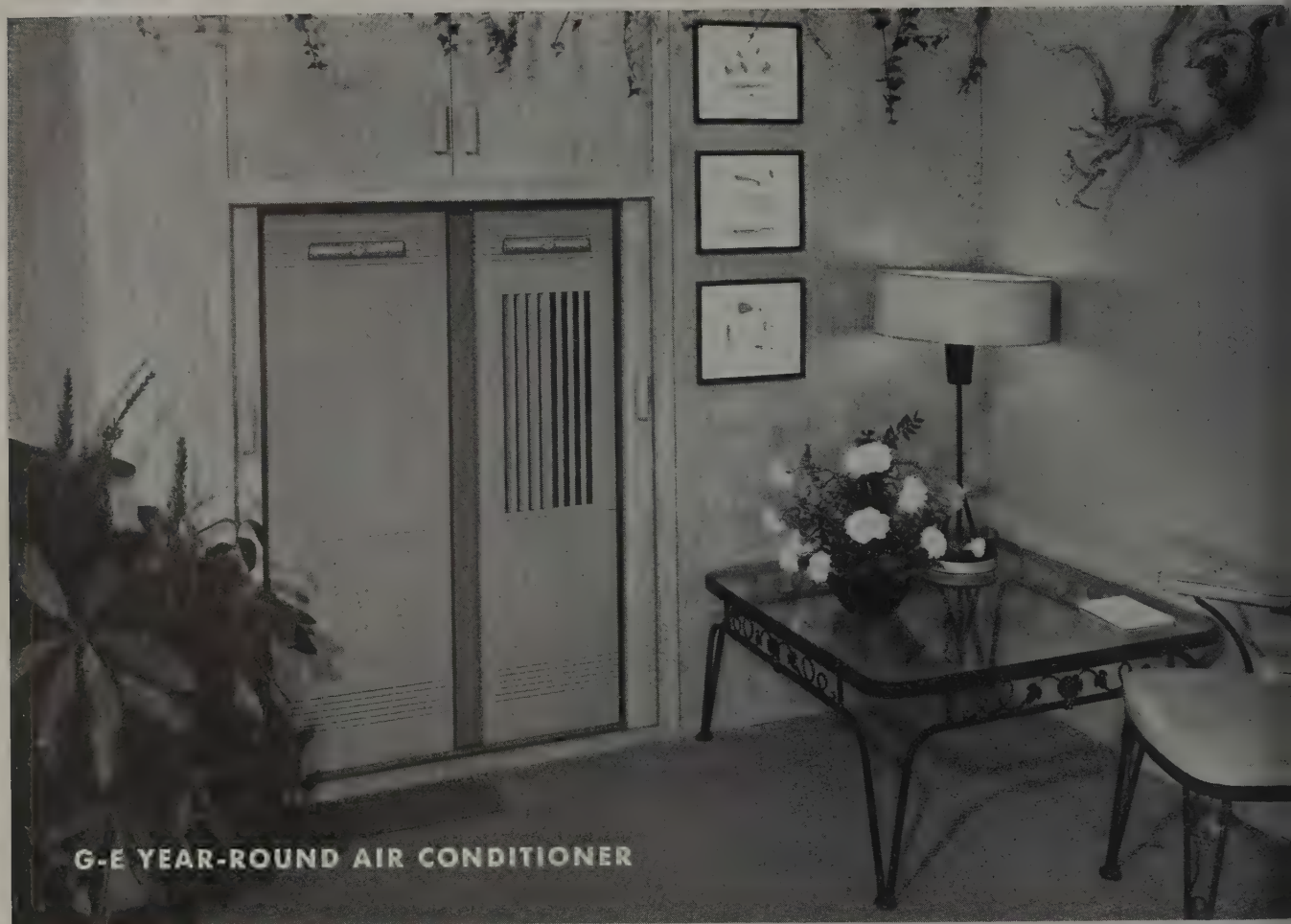
**Average annual incomes of H&G subscriber families, according to a recent subscriber-survey:
20%—\$25,000 or over...39%—\$15,000 or over...55%—\$10,000 or over*

House & Garden

A Condé Nast Publication, 420 Lexington Avenue, New York 17, N. Y.

for the owner-builder market

The Talk of the CAN BE THE TALK OF YOUR TOWN



G-E YEAR-ROUND AIR CONDITIONER

HERE IT IS—the new, all-new, *really small* G-E Year-Round Air Conditioner—exactly as seen by the thousands of enthusiastic home-builders who thronged the G-E exhibit at the recent NAHB

Show in Chicago. Builder after builder told G-E representatives it's just what the industry ordered! Heating and Cooling from a single, small packaged unit they can locate anywhere.



HOME HEATING & COOLING WITH **AIR WALL*** SYSTEM

Builder Show

G.E.'s new Year-Round Air Conditioner uses as little as 8.2 sq. ft. of floor space—with over 190 model choices—the sensation of NAHB's recent Chicago convention!

THE AIR CONDITIONER BUILDERS ASKED FOR!

Hottest news at the 1953 Builders' Show—the new, all-new G-E Year-Round Air Conditioners are big, exciting news wherever new homes are being built. That's because this sparkling new unit was built to satisfy builders—and their customers! Builders have a wonderful new way to speed home sales, plus a unit with G-E dependability that cuts costs and saves space. Homeseekers get the perfect answer to their long-expressed desire for automatic cooling and heating in the *entire* home.

SMALLER THAN YOU'D BELIEVE POSSIBLE! No. 1 hit with builders is G-E's compactness. You save valuable dollars in floor space! Most popular size takes only 8.2 sq. ft. of floor space; all sizes, even the largest, are only 55" high and 30" deep. You get full capacity cooling and heating from a unit you can tuck away anywhere—closet, utility room, crawl space, garage, or basement. You'll save on installation and handling too! Units are light, can be carried through an ordinary door.

FOR ANY SIZE HOME—ANY CLIMATE! G-E's line features *complete flexibility!* There's a unit to fit *your* home as *designed!* Over 190 models to choose from...choice of fuel—oil or gas...choice of power supply. Works well with conventional ducts, or get extra benefits with G-E's unique *Air-Wall System*. G-E engineering provides just what you need!



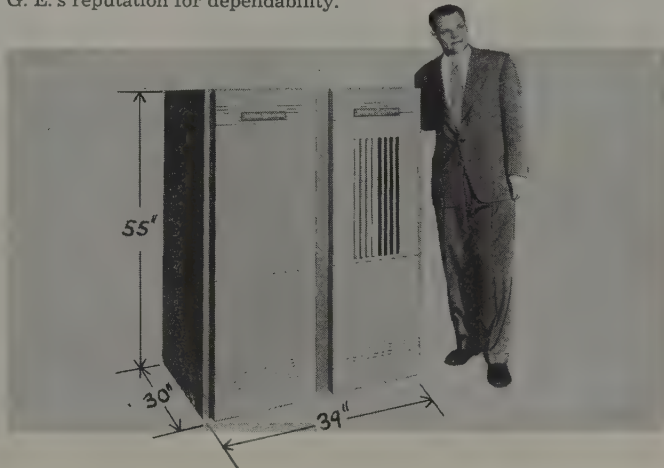
G-E Air-Wall System gives extra benefits! Perfect for both heating and cooling! Many construction savings possible with this pre-engineered, space-saving, small-duct system. Same registers deliver both cooling and heating, eliminating high-wall registers. Air is spread upward—never blasted straight out. Blends beautifully with any setting, allows full freedom of furniture and drapery arrangement. No carpet-cutting required.

Heating and cooling from single, small, factory-packaged unit! All models only 55" high, 30" deep. Width varies from 39" to 74" depending on capacity. Over 190 combinations to choose from. Cooling from 2 to 5 tons. Gas heating from 48,000 to 168,000 BTUH output. (Types of gas: natural, mixed, mfd., LP and LP-air.) Oil heating from 60,000 to 155,000 BTUH output. Installation anywhere in your homes is simple, fast. Unit uses as little as 8.2 sq. ft.

FOLKS ENJOY LIVING WITH A G-E! It's handsome, with an attractive two-tone finish that enhances the beauty of any decor. It's whisper-quiet—for the whole cooling system is hermetically sealed in steel and spring-mounted internally to eliminate vibration. It's fully automatic. At the flick of a finger, you get cool, dehumidified air through the entire home in summer. In winter, wonderful, economical warmth! You're assured of dependability with G-E. Every cooling mechanism is factory-sealed and backed by G-E's generous 5-year *Protection Plan!*

G-E HELPS YOU MERCHANDISE YOUR HOMES! G. E. is interested not only in selling air conditioning, but in helping you sell your homes! We'll cooperate with you in local advertising, publicity, and model home promotion—most complete line of home-selling aids in the business!

G-E OFFERS A COMPLETE LINE of furnaces and boilers for oil and gas, warm air, hot water, steam or vapor—all designed to give economical comfort—all backed by G. E.'s reputation for dependability.



GENERAL  ELECTRIC

General Electric Company, Air Conditioning Division, Sec. HH-12, Bloomfield, New Jersey

Please send me free booklets on Year-Round Air Conditioning ☐

Please have my G-E dealer tell me the complete G-E story ☐

NAME

TYPE OF BUSINESS

ADDRESS

CITY..... COUNTY..... STATE



SEND FOR THE FACTS TODAY!

g. Trademark of General Electric Co.

FOR THE

Extra Baths

HOME BUYERS DEMAND



More livability in every square foot of floor area is the big demand today.

More bathrooms and *better shower bathing facilities* add basic appeal which helps sell your homes.

Offer your prospects both, with Weisway Cabinet Showers.

Self-contained Weisways make complete *extra* bathrooms possible in small floor area. They afford greater enjoyment of increasingly popular modern shower bathing—in a leakproof enclosure that keeps water off bathroom walls and floor!

Weisway

CABINET SHOWERS

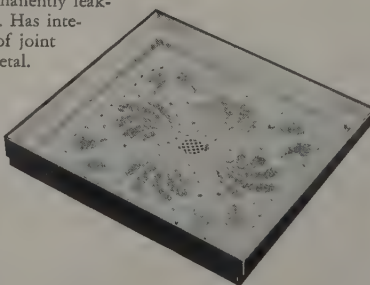
Guaranteed

Engineered and precision-built to quality standards, Weisways are easily, quickly installed. Independent of building walls and floor, they are not affected by shrinkage or settling. Walls are Bonderized, galvanized heavy-gauge steel with two separately baked-on coats of enamel—corners sealed in compression-tight joints.

Receptor formed in one piece of heavy enameling iron, with vitreous porcelain enamel inside and out. Exclusive Foot-Grip, No-Slip floor is safe, sanitary, positively non-absorbent, quiet as the tread of a bare foot. No metal underpans required, no messy mastic—one man places the receptor easily, quickly.

Mail Coupon for details and catalog showing models for homes in every price class.

WEISWAY VITRECEPTOR Permanently leak-proof non-slip shower receptor. Has integral flashing to make leakproof joint with shower walls other than metal.



Here one Weisway gives practical effect of two bathrooms.



Irregular floor areas can be used for complete bathrooms.

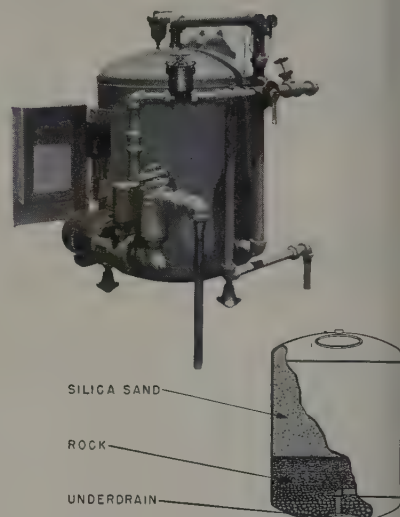


Corner entrance Weisways provide complete baths in small space.

HENRY WEIS MANUFACTURING CO., INC.
342 Weisway Building, Elkhart, Indiana
Send catalog on Weisway Cabinet Showers.

Name _____
Street _____
City _____ State _____

NEW PRODUCTS *continued*



FILTER PLANT is pre-engineered for home swimming pools

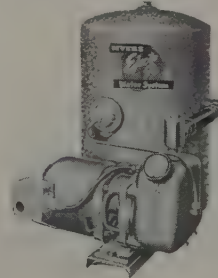
With the aid of this packaged filter and overflow equipment contractors may find it easier to build trouble-free swimming pools. Developed for residential installations, the Landon filter plant and self-skimming pool overflow assembly includes a self-priming pump and motor, strainer and basket, two pressure gauges, and underdrain. Unlike the usual plant setup requiring about eight to ten valves the Landon system utilizes just one dial-type valve to control filtration, backwashing, and overflow. Three sizes are available: 30" diameter with 3/4 h.p. motor at \$705; 36" with 1 h.p. at \$817.75; and 42" with 1 1/2 h.p. at \$1,133.15. The manufacturer also provides plans, specifications, estimating forms and installation data to architects and builders.

Manufacturer: Landon, Inc., 5920 Sepulveda Blvd., Van Nuys, Calif.

COMPACT WATER SYSTEM adaptable to shallow or deep well

Furnished complete with an 11 or 21 gal. tank, the *Ejecto, Jr.* electric water system may be used with any well up to 40' deep. It is small enough to be placed under a kitchen sink, and is reasonably priced at \$110 to \$120, depending on tank size. The system may be converted at any time from shallow to deep well use simply by changing one threaded connection.

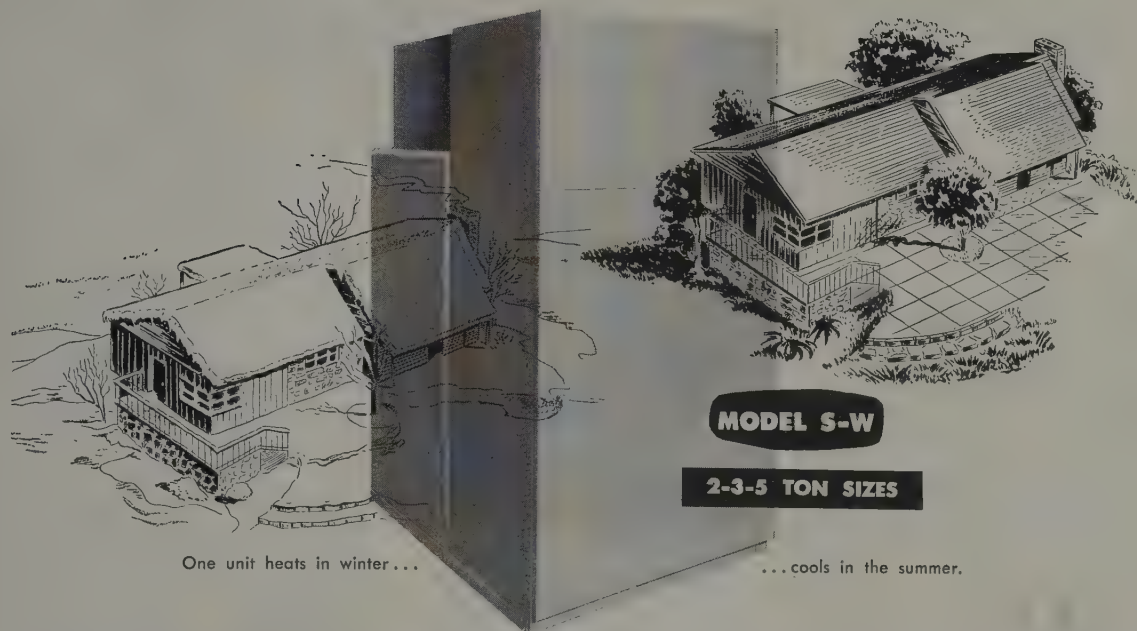
Manufacturer: E. E. Myers and Brother Co., Ashland, Ohio.



continued on p. 196

Greatest Home-Selling Feature Since Central Heating...

AND TYPHOON HAS IT



One unit heats in winter...

...cools in the summer.

MODEL S-W

2-3-5 TON SIZES

YEAR-ROUND AIR CONDITIONER FOR THE HOME

The boom in home air conditioning is on — and you can get in on the ground floor with Typhoon. One compact unit that gives complete indoor control of temperature, humidity, circulation. It means year-round comfort and other important advantages for your customers. It means easier, smoother selling for you. Give the next homes you build the sales magic of year-round air conditioning.

44 YEARS OF COMFORT ENGINEERING IN THESE EXCLUSIVE TYPHOON FEATURES!

ONLY TYPHOON has one-button control — summer or winter, a touch of a button brings cool air or warm... automatically!

ONLY TYPHOON has an all-copper condenser—it defies rust and corrosion, gives trouble-free service.

ONLY TYPHOON is a miracle of compactness—takes up less space than any other unit, can even fit into a standard closet!

ONLY TYPHOON has completely automatic changeover design—for

switching from heating to cooling; no dampers to manipulate!

SIMPLE TO INSTALL — Just a few quick connections and within hours your Typhoon unit is ready to function.

INEXPENSIVE TO OPERATE — Engineered to the point of greatest economy consistent with dependable performance.

QUIET — Completely insulated heavy-gauge steel cabinet and floating spring base assure whisper-quiet operation.

A.G.A. APPROVED. Perfected, Tested and Factory-Guaranteed by Typhoon.

Year-Round Air Conditioning
With ONE CENTRAL UNIT
Fully Automatic

**TYPHOON
HAS THE KEY**

to this great
new home market
— write, wire, phone
for information today.

TYPHOON

AIR CONDITIONING CO. INC., 794 Union Street, Brooklyn 15, N. Y.
Specialists in Air Conditioning Since 1909.

Pittsburgh Glass

*can help you get handshakes
instead of headaches*



CARRARA GLASS on the walls and ceiling of a bathroom gives a home an exciting, glamorous look. Builders put up more "sold" signs on homes having this high quality, beautiful veneer material. And on renovating jobs, they please home owners no end. Where the advantages of Carrara Glass are wanted at minimum cost, Pittsburgh has available Ready-Built Carrara Panels for use as tub recesses in bathrooms, as well as for stove backings in kitchens. Carrara lasts a lifetime, is easy to keep clean and sparkling. It's not affected by water, chemicals, grease or pencil marks. Ten attractive colors to choose from.

A TRIPLE-MIRROR arrangement is sure to please prospective new-home buyers or persons interested in modernizing their present houses. Two doors in the bedroom—fairly close together—equipped with full-length Pittsburgh door mirrors, with a third full-length mirror placed on the wall between, will do the trick. But make sure you supply Pittsburgh door mirrors. They're made from Polished Plate Glass . . . are really full-length—68 inches high. Sizes are available to fit more than 90% of all interior millwork doors—16, 18, 20, 22, or 24 inches wide.

Every Nickel you spend on glass shows. And the results always far outweigh the cost.



TWINDOW multi-units create a window wall which admits an abundance of natural daylight, while keeping interiors more comfortable. Occupants have a clear view of the outside from inside the home. In new building or remodeling, you can't offer a more-appreciated feature than Twindow—"the window with built-in insulation." And this is possible even in average-size homes, like the one shown here. Photo, courtesy of National Homes Corporation, Lafayette, Indiana.

SOLEX-TWINDOW. Where protection against solar heat and sun glare is required, there's nothing like Solex-Twindow. The inside light is regular Plate Glass . . . the outside pane is green-tint' Solex, "the best glass under the sun!" This combination gives the double advantages of Twindow's high insulating properties, plus the solar-heat-absorbing, sun-glare-reducing advantages of Solex. The entire unit is enclosed by a stainless steel frame—to protect the seal and glass edges and to make handling easy, quick and safe.

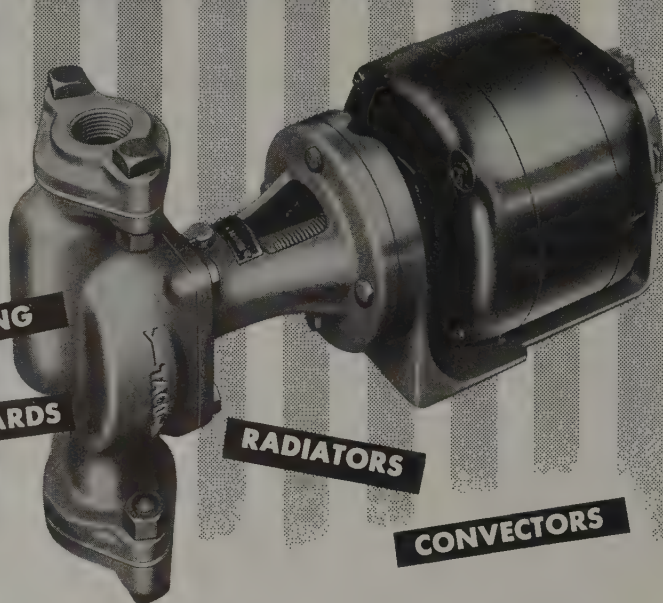
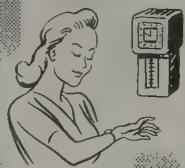
Build it better with Pittsburgh Glass

See Sweet's Builders Catalog for detailed information on Pittsburgh Plate Glass Company products.

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

get FAST, RESPONSIVE HOT WATER HEAT for



PANEL HEATING

BASEBOARDS

RADIATORS

CONVECTORS

with this popular TACO CIRCULATOR

EVEN LOW BUDGET HOMES CAN NOW HAVE THESE LUXURY ADVANTAGES

RADIANT WARMTH • DRAFTLESS WARMTH • CONTROLLED WARMTH

MORE HOT WATER FOR KITCHEN, BATH AND LAUNDRY

Yes, forced hot water heat with a TACO circulator gives all this *plus* economical warmth. No need for a separately fired water heater. TACO TANKLESS, hooked up to a heating boiler, supplies year 'round low cost hot water.

The TACO circulator delivers heat where it will give the greatest comfort . . . whether you use radiant panels, convectors, radiators or baseboards.

**ARCHITECTS-ENGINEERS
WRITE FOR . . . SIMPLIFIED
SELECTION CHART FOR SIZ-
ING TACO WATER HEATERS
UNDER ANY CONDITIONS.**

Three other famous TACO PRODUCTS for houses

TACO-VENT



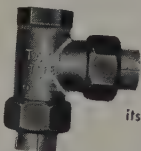
eliminates air from hot water radiation automatically

TANKLESS TACO



gives an abundant supply of hot water instantly. No need for storage tank.

TACO TEMPERING VALVE



thermostatically mixes hot water with cold so there's no danger of its being too hot.

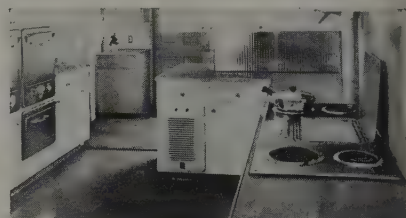
**Better Heating-
Better with Taco**



Taco

TACO HEATERS, INCORPORATED • 137 SOUTH STREET • PROVIDENCE 3, R. I.

NEW PRODUCTS *continued*

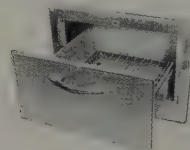


BUILT-IN EQUIPMENT gains popularity, new utility features

Built-in cooking units are catching on rapidly with homebuilders and home buyers because of their design adaptability and convenience. Even in the \$10,000 to \$12,000 house market these sophisticated appliances can make up for the additional cost over standard ranges in sales appeal and space savings. Recently, decentralized cooking units have been pacing the field with important innovations. Pioneer built-inner, Thermador, put a griddle in the



middle of its electric surface cooking unit. The firm also developed a unique luxury item—a warming drawer 22 $\frac{3}{4}$ " wide, 16" high and 23" deep, for keeping china and hot foods at



the right temperature for serving. The range-griddle measures 25" long, 21 $\frac{3}{4}$ " wide and retails for \$199.50. The built-in warming drawer costs \$81.

Cooking with gas, Chambers went a step further and integrated a griddle that doubles as the lid for a waist-high broiler. A handle



on the front of the tabletop range swings the aluminum griddle up and raises the broiler platter. Another handle adjusts the platter to the right height; the hot rack is not touched.

continued on p. 200



"We prefer
REVERE COPPER WATER TUBE
TO ALL OTHER MATERIALS

*for Radiant Panel Heating because of its easy
 workability, permanence and the assurance
 of a quality job"*

says A. C. HARDEN
 President
 Harden Heating &
 Air Conditioning Co.,
 Elmwood Park, Ill.

... AND MR. HARDEN HAS OVER 550 COMPLETELY
 SATISFACTORY INSTALLATIONS IN HOMES
 AND CHURCHES TO BACK UP HIS STATEMENT!

"Because we have a reputation for quality work to uphold, we can't afford to take chances and use inferior materials. In addition, Copper Water Tube is so easy to bend, so easy to work with in the tightest spaces and requires no thread cutting so that it saves us a lot of installation time. We have also found that we can place the utmost faith in the fittings when using Copper Water Tube."

"Those are the reasons we prefer copper to all other material". And Mr. Harden speaks from experience. For he has installed copper radiant panel heating systems in over 50 churches and more than 500 residences, and all are completely satisfactory in every respect. The oldest has been in operation for 7 years.

Take a tip from Mr. Harden's experience... keep out of trouble with copper.

Now with restrictions eased, and quantities permissible without allotments greatly increased, there isn't any reason why you can't use Revere Copper Water Tube for radiant panel heating, hot and cold water lines, underground service lines, processing lines, and waste stack and vent lines. See the Revere Distributor nearest you today. And, if you have technical problems, he will put you in touch with Revere's Technical Advisory Service.

REVERE

COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801
 230 Park Avenue, New York 17, N. Y.

Mills: Baltimore, Md.; Chicago and Clinton, Ill.; Detroit, Mich.;
 Los Angeles and Riverside, Calif.; New Bedford, Mass.; Rome, N. Y.—
 Sales Offices in Principal Cities, Distributors Everywhere.

SEE REVERE'S "MEET THE PRESS" ON NBC TELEVISION, SUNDAYS

**WHY REVERE COPPER WATER TUBE
 IS PREFERRED BY—**

Architects, Builders, Plumbing & Heating Contractors

EASY TO BEND

Saves Time



Revere Copper Water Tube is easy to bend. Soft temper can be bent by hand to meet installation conditions. Hard temper by hand bending tools.

HANDY LENGTHS

Save Fittings... Labor

Revere Copper Water Tube comes in straight lengths of 20' in hard and soft tempers. 60' coils of soft temper reduce the number of fittings needed.



**SOLDER OR
 COMPRESSION FITTINGS**

*Need Less Work Room
 ... Save Metal*



No worry about wrench room when you use Revere Copper Water Tube with solder fittings. Compression fittings can also be used. No threading is necessary with either type fitting. Wall thickness of tube used can thus be less than for threaded pipe.

NON-RUSTING

Rustable pipe eventually clogs as shown in drawing at top right. Non-rustable Revere Copper Water Tube suffers no loss of flow or pressure as shown at bottom right. No allowance in pipe size need be made for rust accumulation with Revere Copper Water Tube.



Sparking a revolution in small-home

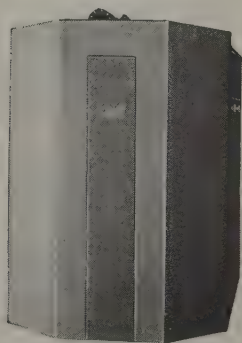
Servel presents an all-new

...the perfect

It's a Genuine Servel — Ready to Install!

Here is a top-quality, low-cost packaged unit by the world's foremost maker of *All-Year* home air conditioning that provides *all seven* true air-conditioning advantages:

1. Heats in winter. 2. Cools by refrigeration in summer. 3. Cleans the air. 4. Removes excess moisture on hot days. 5. Adds needed moisture on cold days (optional). 6. Circulates the air. 7. Ventilates with outside air.



A New 3-Ton Servel Unit!

For larger homes, Servel now offers a new, improved 3-ton unit at a record-breaking low price! Provides every advantage of complete *All-Year* air conditioning for the entire house. Operates on gas or oil. Full 3 tons of refrigeration capacity, heating output, 96,000 B.t.u. per hour. Five-year guarantee.



Building



All-Year[®] Air Conditioner

packaged unit for low-cost houses!

IT'S ON THE WAY—soon—ready to become your next great sales attraction! It's today's most amazing development in small-home air conditioning—a revolutionary achievement by world-famous Servel!

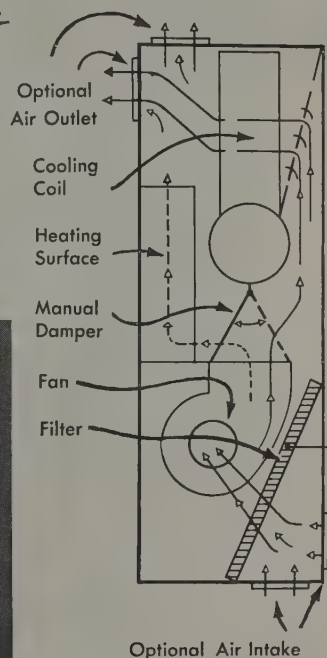
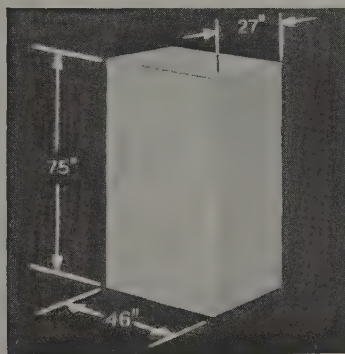
This remarkable new 2-ton Servel unit simplifies space and air-distribution problems . . . permits building plans that can actually save money. What's more, it's a package job, ready to install speedily, easily!

Just look at these advantages: runs on dependable low-cost gas . . . has *no moving parts* in heating or cooling units . . . is quiet and vibration-free . . . requires practically no service . . . carries a full five-year factory warranty.

Think of what this new Servel 2-ton unit can do to sell home-buyers on *your* next project! See your Servel distributor about this revolutionary, new, sales-winning Servel package—or return the coupon below.

Amazingly Compact

Occupies only 8.62 sq. ft. of floor space, weighs only 890 lbs.! Full 2-ton refrigeration capacity. Delivered heating capacity, 72,000 B.t.u. per hour.



Servel

the name to watch for great advances in
**AIR CONDITIONING—
REFRIGERATION**

MAIL TODAY!

SERVEL, INC., Dept. HH-3, Evansville 20, Indiana

Please send me at once complete information about the new 2-ton Servel All-Year Air Conditioner.

Name _____

Street _____

City _____ Zone _____ State _____

NOW! The Only Built-In BROILER-GRIDDLE That Sets in a Counter-Top



Chambers® 4 Burner "IN-A-TOP"® Broiler

America's leader in built-in gas cooking equipment now moves even further ahead with a COUNTER-TOP BROILER and GRIDDLE combined with four big burners—all in only 42" of counter space. One of the most famous features of the Chambers Range, the IN-A-TOP Broiler and Griddle, takes the stooping and bending out of broiling. The unit is stainless steel throughout and all burners light automatically.

Add eye-appeal to your kitchens with these sleek, eye-catching stainless steel built-in cooking units—featuring Chambers World Famous Cooking Performance. Perfect for all standard kitchen cabinets: wood or metal—or can be bricked in solid. No outside venting required.

For all types of gases...city, bottled or tank. FHA approved for underwriting loans.

Originator and Master Builder of Insulated Ranges Since 1910.
BUILDERS — DEALERS — ARCHITECTS
Get Complete Details Today



MAIL
COUPON
FOR
MORE
INFORMATION

Chambers, 2464 N. Meridian St., Indianapolis, Ind. Dept. AFT353

I am interested in:

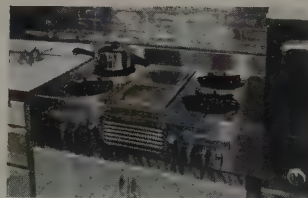
- ☐ AIA Specification Sheet
☐ Dealer Franchise Information
☐ Special Builder Prices on Sample House
Dealer ☐ Builder ☐ Architect ☐

NAME
FIRM NAME
ADDRESS
CITY ZONE STATE

Cabinets Manufactured For Use With Chambers "Built-Ins" Include:
Askren, Indianapolis, Ind.
Beautycraft, Baltimore, Md.
Beauty Queen, Maumee, O.
Belwood, Ackerman, Miss.
Coppes-Nappanee, Nappanee, Ind.
Curtis, Clinton, Ia.
Geneva, Geneva, Ill.
Harrison, Chicago, Ill.
I-XL, Goshen, Ind.
Kitchen Maid, Andrews, Ind.
Long-Bell, Longview, Wash.
Lyon, Aurora, Ill.
Olympia, Olympia, Wash.
Porta-Bilt, Nappanee, Ind.
St. Charles, St. Charles, Ill.
Tracy, Pittsburgh, Pa.
And Many Others



NEW PRODUCTS *continued*



Retail price for the combination 42"-long cooking unit is \$299.50.

Manufacturers: Thermador Electrical Mfg. Co., 5119 District Blvd., Los Angeles 22, Calif. Chambers, Shelbyville, Ind.

LAUNDRY AIDS do cabinet disappearing act

The old handy foldaway ironing board is making a comeback in a sleek new manner. Kitchen Maid has integrated a now-you-see-it-now-you-don't board into a base cabinet unit, put a hamper on wheels next to it, and topped



them both with a work counter. The board slides out easily and may be adjusted for stand up or sit-down ironing. The cabinets are suitable for installation in a general utility room or in a kitchen. An aluminum drying rack folds into a wall unit and is convenient for hanging freshly ironed clothing.

Manufacturer: Kitchen Maid Corp., Andrews, Ind.



TEMPERED HARDBOARD precut for siding

The low initial cost of pressed wood hardboard, the easy way it handles and takes paint, and its trim appearance make it practical for use as exterior siding. Cognizant of the material's growing popularity, Masonite is now packaging it precut in 1', 16" and 2' widths, 8', 10' and 12' long. It is available in 1/4" and 5/16" thickness at about \$19 per package (72 sq. ft.) and is specially treated for exterior ap-

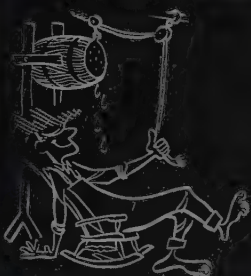
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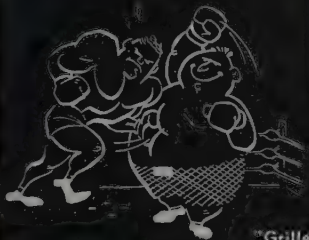
"All sizes and types"



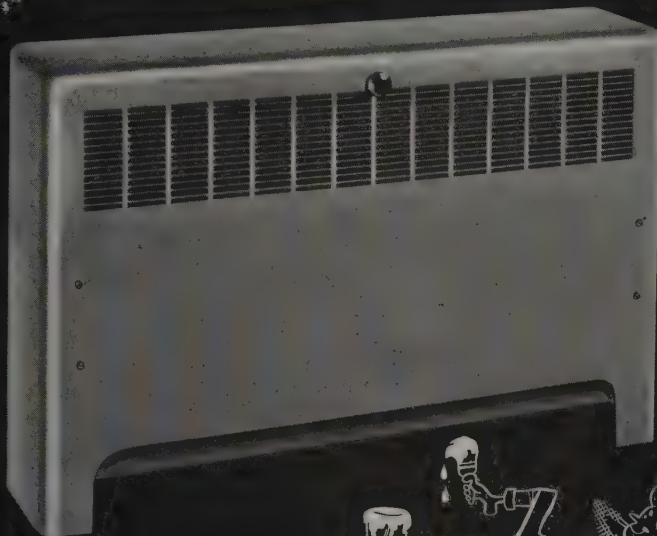
"Really fast heat transfer"



"Easy-to-reach damper control"



"Grille punched into heavy, one-piece front"



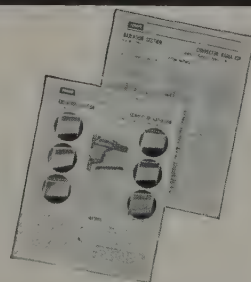
"Simple to paint—any color"

Set Dunham's "Dial"... You're Set For Better Heat

Turn the knob on Dunham's new damper and you're set for most effective heat distribution. Why overheat when it's so easy to "put the damper on" heat output? And why let air swirls and eddies cut down good convection when this Dunham damper directs air through the louver grille?

And since the Dunham grille is an *integral part* of the heavy, sheet steel front... there are no separate panels to rattle, no bolts or welds to loosen. Just a sturdy *one-piece* front and grille.

You're set for better heat... for a longer time... when you have Dunham Convectors. Write for further facts.



Send for Free Literature—Folders 1205-5 and 1206-5 give full information on sizes and types, design and construction details, plus complete capacity tables. For your free copies write to: C. A. Dunham Company, 400 W. Madison Street, Chicago 6, Illinois.

DUNHAM

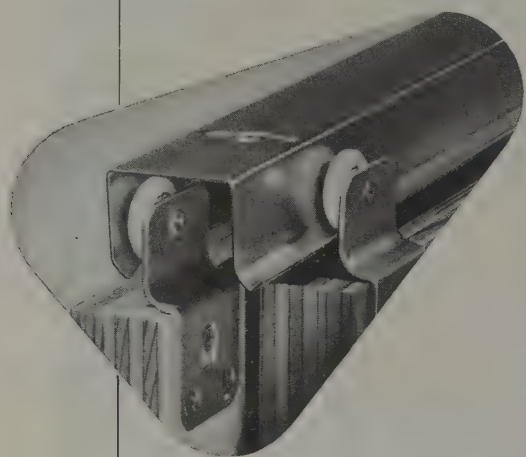
CONVECTOR RADIATION



Quality first for fifty years

ANOTHER QUALITY PRODUCT OF C. A. DUNHAM COMPANY—CHICAGO • TORONTO • LONDON

simplicity

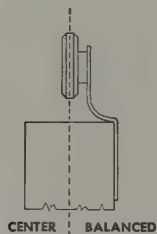


a few parts...
...a few minutes



WASHINGTON LINE

Three types of bearings available.
Ask your dealer for more information or write to:
WASHINGTON STEEL PRODUCTS, INC.
Dept. HH-3, 1940 East 11th Street, Tacoma 2, Washington



PATTERN FOR

Beauty

Daylight plays an interesting role in the decor of the living quarters of the residence of Mrs. Bruce Crow, Mesa, Ariz. Photo by Frank L. Gaynor, Tucson, Ariz.

This friendly partition of softened, diffused light adds interest in an unusual manner to this cheerful room. The beautiful Pluralite pattern creates an effective backdrop for furnishings and decorations, while this lovely decorative glass by Mississippi separates living areas of the home without destroying a feeling of unity and spaciousness.

Translucent without being transparent, decorative glass floods adjoining areas with flattering "borrowed" light. The entire home gains an air of leisurely, comfortable, modern living when any of the Mississippi patterns are employed.

Daylight can become a part of your decorating schemes... make homes brighter in the modern manner. Specify figured glass by Mississippi. Available in a wide variety of beautiful patterns from your nearby distributor.

Write today for free booklet, "Modernize Your Home With Decorative Glass." Photographs of actual installations. Many ideas on ways to use this exciting new medium.



MISSISSIPPI *Glass* COMPANY



88 ANGELICA ST. SAINT LOUIS 7, MO.
NEW YORK • CHICAGO • FULLERTON, CALIF.

WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

Youngstown Kitchens introduces → Powerful new sales idea for today's changing market!

Here it is . . . the builder's answer to merchandising homes in today's market. The luxury of decorator colors *plus* the economy of steel Youngstown Kitchens lets builders meet the demands of selective, value-seeking buyers.

America's leading artists and decorators have joined Youngstown Kitchens to offer you *Controlled Color Kitchen Decorating* . . . the exciting new way to give your homes decorator-planned kitchens . . . dramatic sales appeal.

This is just one of the many ways Youngstown Kitchens stays alert to help you merchandise your homes. Get full details of *Controlled Color Kitchen Decorating* from your distributor. Or write *Builder Sales Division, Mullins Manufacturing Corporation, Warren, Ohio.*



Youngstown Kitchens **CONTROLLED COLOR** KITCHEN DECORATING *includes...*



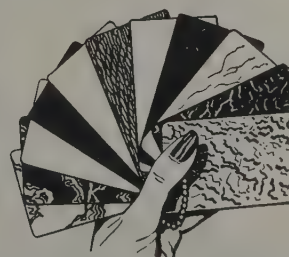
Handsome new draperies in a wide choice of exclusive designs and patterns for exciting kitchen beauty, plus . . .



Colorful wall covering in Varlar, the stainproof wall covering, for beautiful decorator-planned kitchens with . . .



Attractive decals in 22 exciting designs, made by the largest decal maker, allow your prospects endless decorating combinations and . . .



Colorful Cabinet tops with new genuine beauty-bonded FORMICA added to give prospects their choice of the 4 greatest cabinet top materials: Formica, Youngstown Kitchens Cusheen, linoleum and edge-grain maple.



See the latest advances in colorful dream kitchens! Two-page, full color spread in McCall's for April and one-page, full-color ads in other national magazines will start prospects looking for this exciting new color program in your homes.

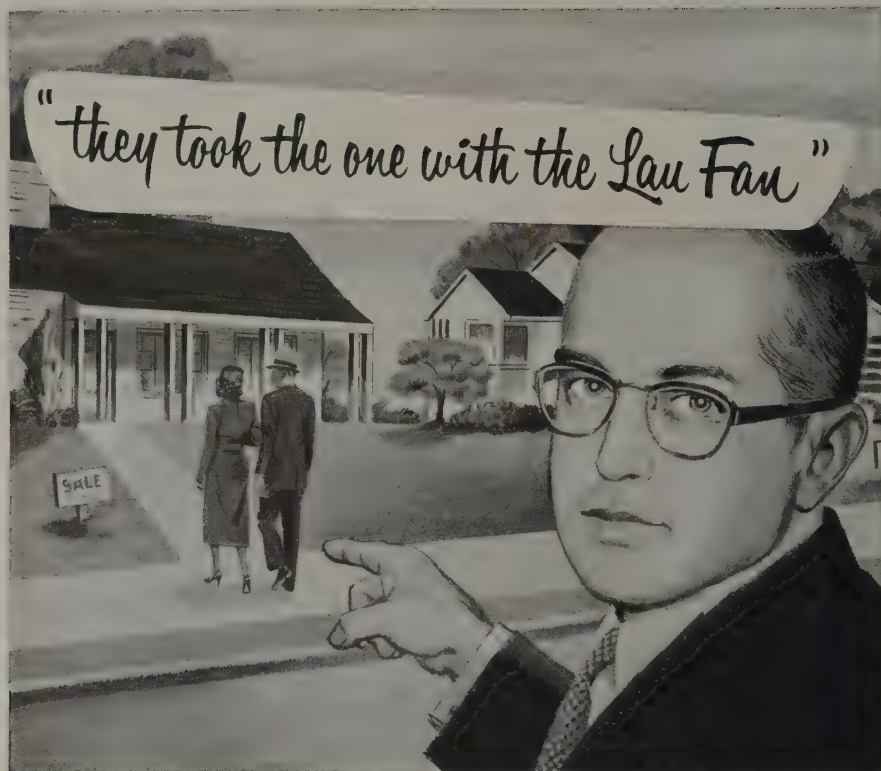
Also see McCall's editorial pages in March for the complete story.



Youngstown Kitchens

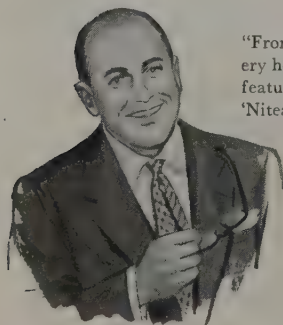
MULLINS MANUFACTURING CORPORATION
WARREN, OHIO

Youngstown Kitchens are sold throughout the World

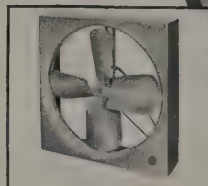
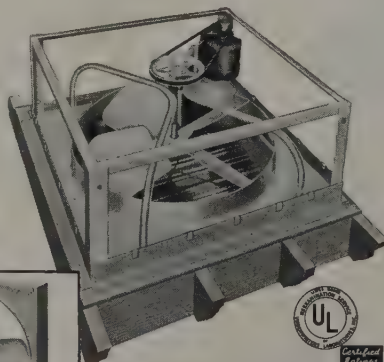


Home building today is a competitive market and becoming more so. Modern builders know that "features sell homes" . . . and one of the best and most practical features is an adequate cooling system, particularly when the cost is negligible.

With a Lau "Niteair" Rancher Fan or Panel Unit properly installed, you can be sure of a plus feature that will appeal to 9 out of 10 prospective buyers. It's the feature that sells the home! Write us today for further information. Ask for Catalog Pages and Specifications Sheets #629 and #630.



"From now on, in every home I build, we'll feature a low cost Lau 'Niteair' Fan."



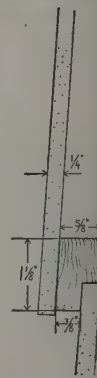
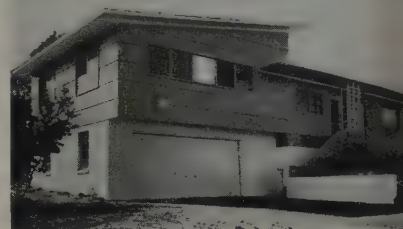
Each fan carries Certified Rating. Entire unit is Underwriters' Laboratory Approved. Fully Guaranteed.



Lau "Niteair" Fans are available in a wide range of sizes and capacities to meet every possible need.

THE LAU BLOWER COMPANY • 2027 Home Avenue, Dayton 7, Ohio
World's Largest Manufacturer of Warm Air Furnace Blowers

NEW PRODUCTS *continued*



plications. Used with a special nailing strip, it goes up very quickly since the notched shape of the strip permits the carpenter to nail through siding, strip and stud in one operation. The strip also saves about 1" of overlap and creates a rich shadow line.

Manufacturer: Masonite Corp., 111 W. Washington St., Chicago 2, Ill.

HARDBOARD PANELS cut for stud spacing, grooved to hide nails or staples

Tee-N-Gee is one of those "home-owner-do-it-yourself" products that professional builders might latch onto. It is a new hardboard that may be applied directly over studs 16" o.c. or to furring strips. Nails or staples, driven along the $\frac{3}{8}$ " tongue, are masked by the lip of the adjoining panel. The panels can be set horizontally or vertically—even bent for a curved surface. In remodeling work, they can



be cemented over the old walls. *Tee-N-Gee* boards may be waxed to bring out the natural light wood color, or painted. The material sells for about 15¢ per sq. ft.

Manufacturer: Forest Fiber Products Co., Forest Grove, Ore.

continued on p. 208

NO-SHOK SAFETY DUPLEX RECEPTACLES

installed throughout
3010 UNIT
HOUSING PROJECT
Park Forest, Illinois

3,000 additional home units now being completed will bring this new community to 25,000 population, about half children. To safeguard these thousands of youngsters, American Community Builders have installed NO-SHOK Safety Duplex Receptacles.



NO-SHOK SAFETY DUPLEX RECEPTACLES

afford protection to property and lessen fire hazards by keeping out metal objects, dust, water, etc. — prevent shocks and burns — save lives.

SPECIFIED by leading architects and engineers all over the U. S. for civilian housing projects, industrial and farm installation and Army and Navy housing. R. E. A. approved. Sold through leading electrical wholesalers.

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BELL Electric Company

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Scott's® LAWN BEAUTY

a Plus Value For Your Homes . . .

A sparkling green lawn helps make any house a home. With today's emphasis on outdoor living, large window areas, etc., thick, velvety Scott lawns provide the perfect setting. Their outstanding beauty is a standard of perfection recognized everywhere. Best of all, your homes can have the distinction of Scotts turf for very little, if any more, than ordinary lawns.

Profit by this plus value and resulting enthusiastic client satisfaction by always specifying and using Scott's Seed and Turf Builder. Write at once for our turf specialists' recommendations and prices on your requirements.

O M Scott & SONS CO, 106 Spring St, Marysville, O
also Palo Alto, California

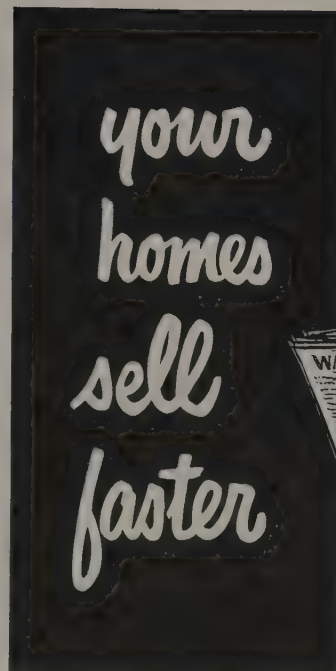


FREE Lawn Care BULLETIN SERVICE

Keep up to date on lawn building developments along with practical tips on soil conditioning, grading, feeding, drainage, seeding, sprinkling, etc. Lifetime subscription to Lawn Care and digest of 100 back issues is yours for the asking.



IT PAYS TO SPECIFY Scott's LAWN PERFECTION



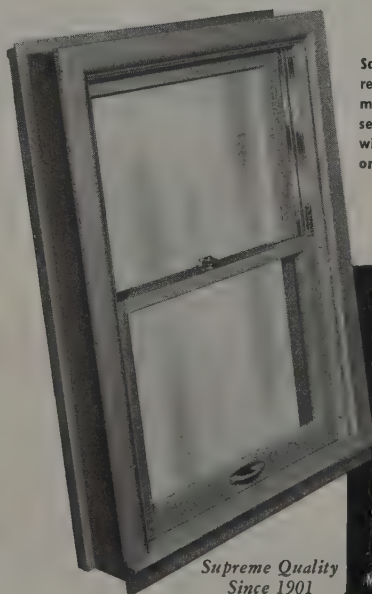
. . . when buyers notice they are built with MALT-A-MASTER wood window units with removable sash.

MALT-A-MASTER wood window units connote "quality." Here is a unit with removable sash, built-in weatherstrip and invisible balances. Since Malta mills them, you are sure of precision milling, quality woods and the most careful workmanship. The price is less than you would expect.

MALT-A-MASTER makes your houses stand out and keeps them moving.

Malt-a-Master

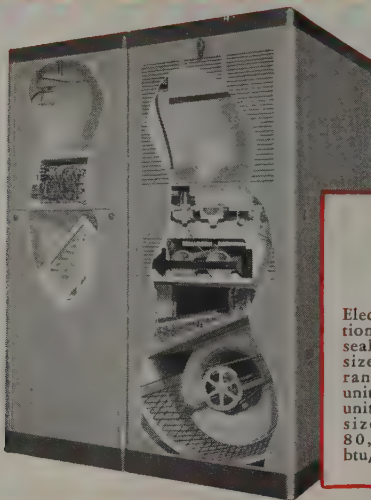
makes your houses STAND OUT



Sash can be removed in a matter of seconds for easy window washing or painting.



58 YEARS HOME COMFORT EXPERIENCE



LENNOX

**ALL SEASON
AIRE-FLO**

Electric twin refrigeration units, hermetically-sealed, 3, 4½, and 6-ton sizes. Five-year warranty on refrigeration units. Gas-fired heating units, AGA approved, in sizes ranging from 80,000 to 200,000 btu/h.

LENNOX ALL SEASON Aire-Flo® AIR CONDITIONING

Lennox leadership in residential heating over the years carries on in residential cooling, too! Experience gained in providing hundreds of thousands of homes with perfect indoor heating comfort is reflected in the quietness, efficiency and economical operation of the Lennox residential combination heating and cooling unit.

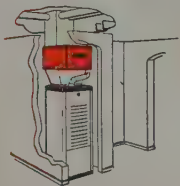
Lennox All Season Aire-Flo is simple to install... completely accessible from

the front... provides two-stage cooling with twin refrigeration units for better humidity control and more economical operation. (The second twin refrigeration unit operates only when the cooling need requires it.)

For specifications or installation applications engineered to your blueprints, write Dept. CH3-53, The Lennox Furnace Company, Marshalltown, Iowa.

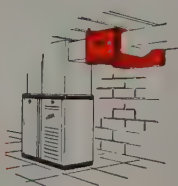
In warm air heating more families buy **LENNOX Aire-Flo® Heating**

LENNOX "STOWAWAY" AND "FLAT-TOP" COOLING UNITS CAN BE INSTALLED IN HOMES WITH CENTRAL FORCED WARM AIR HEATING SYSTEMS!



◀ "Flat-Top" Cooling unit can be installed in closet above regular furnace or underneath a reverse-flow furnace. (2 or 3-ton sizes.)

▶ "Stowaway" Cooling unit can be installed in ductwork of forced warm air heating systems. (2 or 3-ton sizes.)

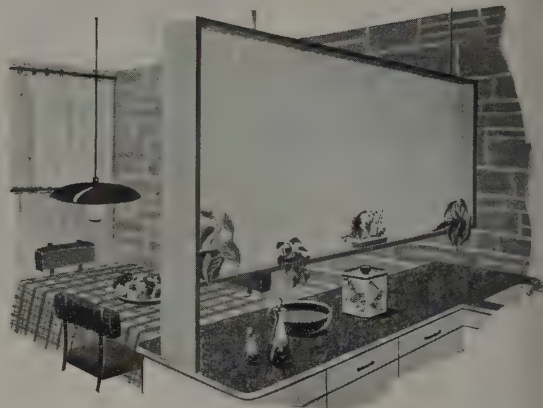


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World's Largest Manufacturers and Engineers of Warm Air Heating Systems

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Highlight Appeal with Low-Cost
dramatic translucence



Cheerful light and glamorous color-harmony accent modern appeal with unique features created of shatterproof Structoglas. Combining maximum light transmission and safety with low-cost construction you can easily adapt Structoglas into unlimited dramatic effect appealing to brighter living.

glass fiber reinforced

structoglas

saves up to 60% over installed cost of other

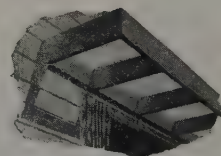
types of light transmitting materials. Strong and shatterproof, Structoglas can be quickly sawed, drilled and nailed to light-weight framing.



MODERN CONVENIENCE is added with a Structoglas bath partition or shower screen... easy to clean... always fresh in appearance... rot and mildew-proof.



BRIGHT AND ATTRACTIVE patio roofs and windscreens provide privacy and protection. Structoglas is weather resistant... long lasting.



REDUCE HEAT in sun-drenched rooms with translucent canopies of Structoglas... that let in only filtered natural light.

- Translucent
- Shatterproof
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- Strong
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- Eight beautiful colors

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International molded plastics, inc.
4387 west 35th street, Cleveland 9, Ohio

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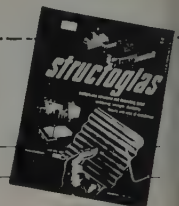
COMPANY

ADDRESS

CITY

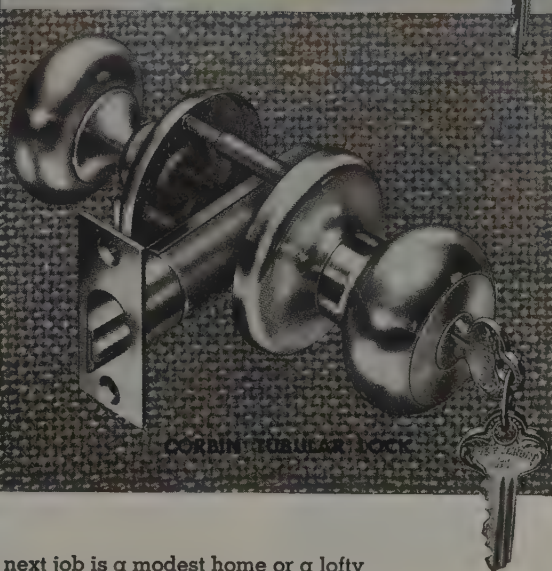
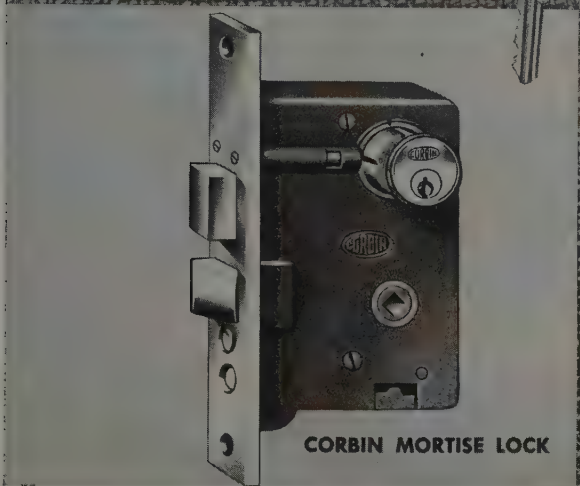
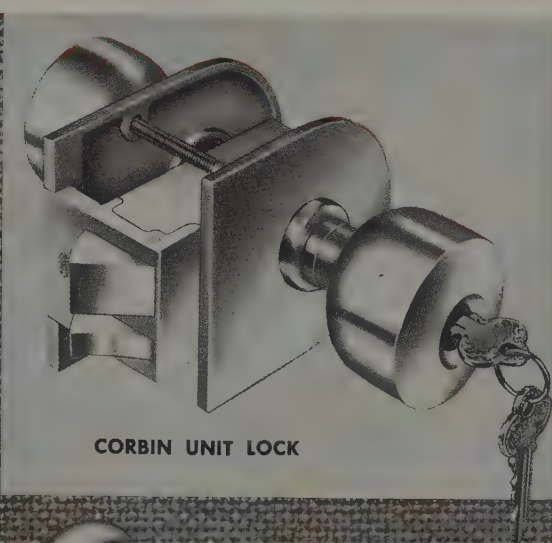
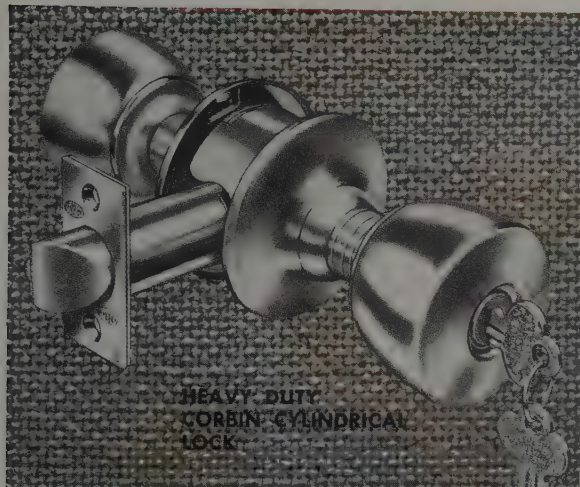
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THE NAME YOU CAN RELY ON

for locks in every price range!

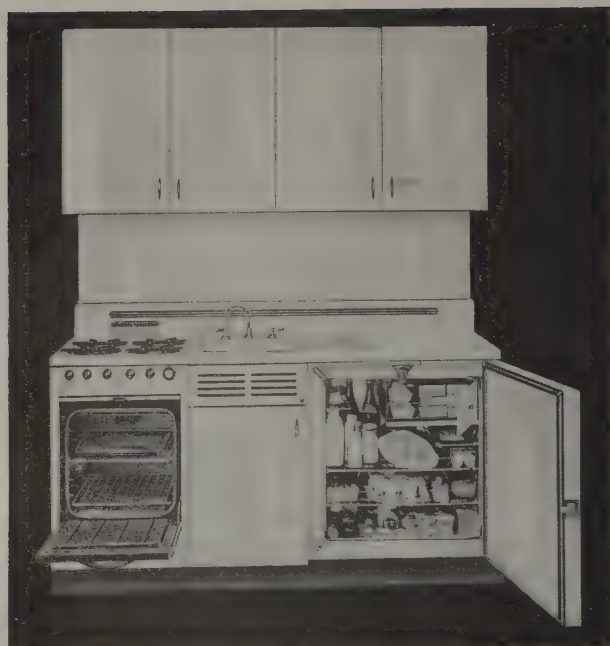


Whether your next job is a modest home or a lofty skyscraper, specify Corbin Locks. In every price range, Corbin offers top value. The Corbin name commands immediate acceptance . . . is in itself a guarantee of customer good-will.

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Gas or electric range.
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Counter, range-top
and sink in one
seamless piece.
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units 39" to 69" wide.

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PORCELAIN FRONTS
AND
WORK TOPS

DWYER KITCHENS

For New Apartments

Typical are the Essex Apartments in Indianapolis where 390 Dwyer Kitchens save room for more spacious living areas. Dwyer Kitchens enjoy 26-year record for durability and trouble-free operation in rental properties.



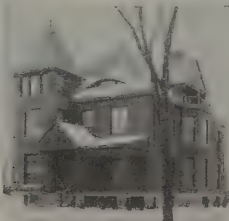
For Vacation Properties

Motels and resort cabins encourage longer stays and better rents with Dwyer Kitchens. Mother gets more vacation too... enjoys full kitchen convenience with minimum work.



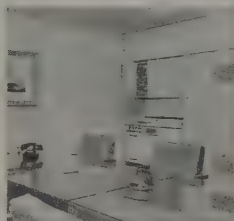
For Remodeling

Change old residences from tax-eaters to profit-makers. Dwyer Kitchens are the key to remodeling into quickly rented apartments.



For Business and Special Uses

Convenient for coffee, for simple or sumptuous food. Thousands used in offices, stores, banks, television and radio stations, fire stations, schools, churches... used for night shifts... and wherever close-at-hand kitchen facilities are needed.



NEW PRODUCTS *continued*

DINING FURNITURE sized and styled for contemporary kitchens

The client's query, "Is there room to eat in the kitchen?" is familiar to most builders. A model kitchen or dining L dressed up with Daystrom table and chairs might be a pleasant convincer. Unlike the usual chrome dinette



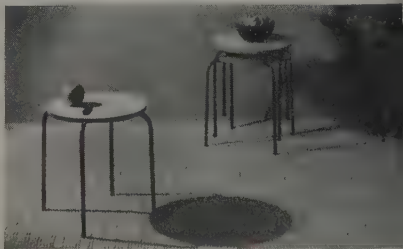
bulky hulks, this freshly fashioned furniture is scaled for small areas. The pieces utilize practical materials dear to the home maker: washable textured plastic over foam-rubber padding on the chairs, scratch and heat resistant melamine-surfaced tabletops, easy-to-sweep-around metal tubular legs. Prices are rational: the trio at top retails for \$89.85; the five-piece set for \$159.95; and the wire-back barrel chair for \$24.95.

Manufacturer: Daystrom, Inc., Olean, N. Y.

STACKING STOOLS: good looking, low priced

This neat set of three Viko stools can nest modestly in a corner, come out for company to sit on or eat from. Wood topped and metal legged, the set retails for only \$9.95.

Manufacturer: T. Baumritter Co., New York, N. Y.



continued on p. 212

SEND FOR FREE BULLETINS ON DWYER KITCHENS

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Town _____ State _____

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MAIL COUPON OR WRITE FOR
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**DWYER PRODUCTS
CORPORATION**

**Dept. H353
Michigan City, Indiana**

Kaustline
FACTORY
ASSEMBLY

CUTS BUILDING COST

SAVES TIME...

Factory assembled, completely wired ready to install. It is only necessary to hook on the plenum, mount the burner and run the hot wire and fuel oil line.

SAVES MONEY...

Servicing is quick and simple with all controls on the front for one spot adjustment and a big service door makes the burner easily accessible.



The Kaustline "LOW BOY"

These fully automatic oil fired Low Boys are designed for cellar installation. There are three factory assembled models delivering 85,000 BTU's, 95,000 BTU's and 100,000 BTU's. Larger units up to 250,000 BTU's are shipped knocked down.

WRITE FOR FULL INFORMATION TO DEPT. H-3



Kaustline
COMPANY, INC.
PERRY, NEW YORK

*There is a Kaustline Furnace or Winter
Air Conditioner for every type of home.*

The man in two positions to buy!

■ **As a businessman,** he buys or influences the buying for his company of goods and services of many kinds from many different sources.



■ **As a family man,** he and his wife and their friends are consistent best customers for all types of better products and services. Their interests are broader, and their means way above the national average.

The wives of TIME-men form the largest concentration of best customers for consumer goods available to American advertisers today.

Q.E.D.

Successful businessmen-family heads like this, with their wives and families, comprise in large part the audience of TIME. Every week TIME's advertising pages talk directly to 1,700,000 families, America's most valuable prospects—best customers in two positions to buy.



now it's

Gold Bond[®] ASBESTONE

Now famous Asbestone siding, roofing, corrugated and wallboard asbestos-cement products join the Gold Bond family of high-quality building materials. The Asbestone Corporation plants in New Orleans and St. Louis increase the number of Gold Bond plants to 35. Now you can specify a Gold Bond product for the outside as well

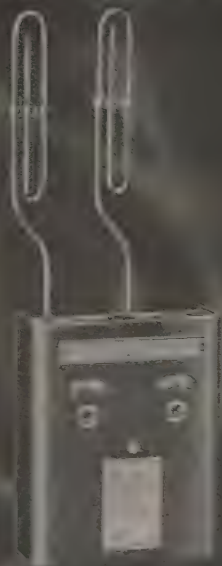
as the inside of homes and industrial buildings—new construction or remodeling. Now the Gold Bond idea of "Undivided Responsibility" is stronger than ever before. Specify Gold Bond all the way, and place the responsibility for product performance on one reputable manufacturer, National Gypsum Company!

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Fireproof Wallboards • Decorative Insulation Boards • Lath • Plaster • Lime • Sheathing • Roofing
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Hydraulic-Action
WARM AIR CONTROLS



SAFETY and COMFORT from WARM AIR Heating Systems

These controls protect the furnace from overheating... and operate the blower efficiently to get the most possible heating comfort from warm air systems.

Their positive accuracy makes them unequalled for control of C. A. C., perimeter, radiant panel, reverse flow and other of the newer type warm air systems where operating temperatures are critical.

Easily installed... specially designed Hydraulic-Action elements are flexible and may be bent to any position.



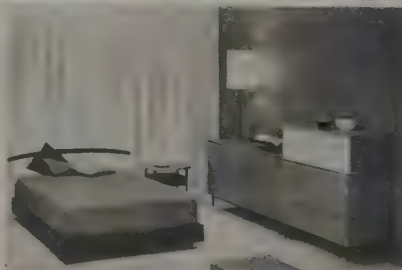
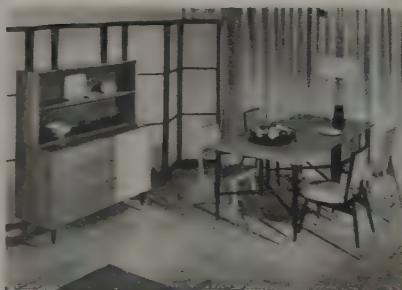
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WHITE-RODGERS

Controls FOR REFRIGERATION
HEATING AND
AIR CONDITIONING

ST. LOUIS 8, MO.

NEW PRODUCTS *continued*



MODERN FURNITURE planned for modest homes, modest budgets

Raymond Loewy Associates have done Mengel—and themselves—proud with this attractive, low-priced furniture. Space and color conscious, the new pieces should find a large market among the current crop of small-home buyers. One suite, *Accent*, caters to those who like metal legged furniture; another, *First Edition*, to all-wood devotees; and *Spectrum* to those with continental leanings. Colors are used boldly and well throughout the lines and the wood finishes are, refreshingly, warm and spicy. Many of the pieces do double duty. The chest (*below*) houses a desk. It retails for \$136.50. The triple dresser (*bottom*), priced at \$161, reveals a mirrored vanity. The screen of translucent plastic in a wood folding frame above is useful as a room divider. It stands 70" high, 80" wide extended, and sells for \$72.

Manufacturer: The Mengel Co., Cabinet Div., Louisville 1, Ky.

Technical Pub. on p. 216



NATIONAL

food waste DISPOSER



There's no doubt about it. Kitchens sell houses. And as important in today's kitchen as the sink itself is the food waste disposer. No kitchen is really modern today without it. And Mrs. Prospective Home owner knows it.

NATIONAL food waste DISPOSERS offer more value to both user and home builder.

National's heavy duty construction, its extra rugged one-third hp motor, that grinds *all* food wastes, its special alloy shredding and grinding elements that never require sharpening, its safety overload switch, are important guarantees to the home buyer of long, trouble-free service.

And to the builder—National's exclusive split ring construction, and National's exclusive simple and positive sink attachment, mean the quickest, lowest cost installation imaginable.

The NATIONAL is available in two models—Model 35CS, with the patented one-piece Safety Lok-Top cover, or Model NC-45 for "continuous feed." Use the handy coupon for quick information.

212

NATIONAL DISPOSERS

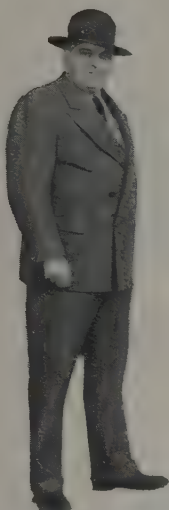
A Product of
NATIONAL RUBBER MACHINERY CO.
AKRON 8, OHIO

Send me more detailed information on the Model NATIONAL DISPOSER checked below:

- ☐ Model 35CS—Safety Lok-Top Cover
☐ Model NC-45—"Continuous Feed"

Builder's Name _____

Address _____



Arden J. Millisor, V. P. of Martha Washington Builders, Inc., Columbus, Ohio. This firm concentrates its building in the Upper Arlington area of Columbus.

Leonard Smith, Columbus, Ohio, Tile Contractor.

"We've been using Mosaic Clay Tile for years . . .

. . . won't use a substitute,
says Arden J. Millisor, Columbus, Ohio builder.

"The goodwill of our long list of satisfied customers was built in part by the fine performance of this quality floor and wall material.

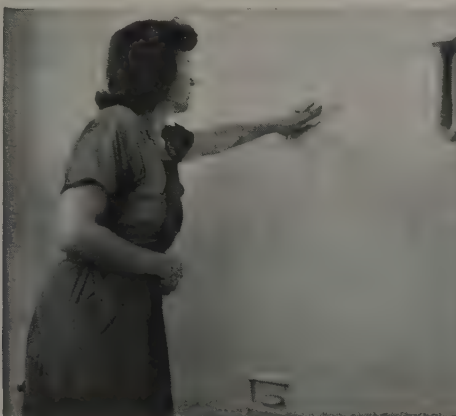
"We find that Mosaic Clay Tile is one of the few materials which takes year after year soaking from shower and tub and remains unharmed. That's why we use it in all our bathrooms, from the most moderately priced houses on up.

"Believe me, we had to spend many good dollars for repair and replacement before we used Mosaic Clay Tile exclusively. Now, you couldn't sell us anything else.

"I've used Mosaic Clay Tile in over 500 homes, since 1924. When anyone asks me what I think about tile, I give them one answer—'see our customers, they'll tell you all you want to know.' Here's what one of our home owners has to say about Mosaic Clay Tile . . ."

"I'm delighted with my tile bathroom," says Mrs. Ray H. Long of 1897 Elmwood Avenue, Columbus. "The time I save washing walls really streamlines my housework. And the smart decorator colors add smartness and character to my bathroom. I'm planning a new sinktop. It'll be Mosaic Tile, of course."

In the home of Mr. and Mrs. Ed. L. Van Cleef, 1842 Westwood Ave., Columbus, Mosaic Tile and All Tile Accessories make cleaning a no-time-at-all household task. The bright, cheery colors please everyone who sees them, and they'll never fade.



Give your customers Mosaic Clay Tile. Tile helps you sell your houses faster, makes your buyers happier.

See Mosaic Clay Tile today at your nearest Mosaic showroom, or at the showroom of your Tile Contractor. For tile-fact literature, write Department 29-15. The Mosaic Tile Company, Zanesville, Ohio.



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(Member—Tile Council of America)
Offices, Showrooms and Warehouses across the nation.
Over 4000 Tile Contractors to serve you

OFFICES:—Atlanta • Boston • Buffalo • Chicago • Denver • Detroit • Greensboro • Hartford • Hollywood • Little Rock • Miami • Milwaukee • Minneapolis • New Orleans • New York • Philadelphia • Pittsburgh • Portland • St. Louis • Salt Lake City • San Antonio • San Francisco • Tampa • Washington, D. C. • Zanesville.

Here's where **GPX[®]** plastic-faced plywood can cut costs for you... and increase your profit on every home

SOFFITS

Select GPX for smooth, check-free, crack-free surfaces. You'll give your customers greater satisfaction and at lower cost to you.

KITCHEN CABINETS

Use GPX GREEN paint grade and cut your finishing time and costs in half. Get a better job, too... smooth, plastic surface eliminates feathering and chipping.

GARAGE DOORS

For good-looking, rugged garage doors, use GPX General Use Grade... hard, tough and abrasion resistant.

GPX is made from top-quality, solid-core Douglas Fir Plywood surfaced with phenolic resin plastic under heat and pressure. It comes in three grades: GPX General Use with a hard, smooth natural finish that never needs painting; GPX GREEN Painting Grade gives you the finest paint surface obtainable; and GPX Concrete Forms are known for maximum re-use and minimum re-finishing. Within each grade is a complete range of thicknesses and overlay weights. GPX combines the structural strength and workability of plywood with the hard smooth surface-toughness of plastic... a natural combination for the modern builder.

Before you start your next job, find out *all* about the time-saving, work-saving and money-saving advantages of GPX. Call your lumber dealer or write for full details.

BUILT-INS

Cabinets, closets, storage walls and bookcases are installed and finished faster and at less cost with GPX. GPX GREEN Painting Grade is a completely solid panel—free of voids.

EXTERIOR SIDING

GPX will give your homes sales appeal... in full panel size or cut in strips and lapped. GPX General Use Grade has a handsome natural finish that never needs painting. GPX GREEN provides the smoothest painting surface obtainable.

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GPX is weather-proof, ideal for all exterior applications. Easier to finish, too.

BASEMENT

GPX Concrete Forms have been re-used more than 50 times. If you build several homes a year, you can save money on every house with GPX concrete forms.

INTERIOR WALLS

Big 4 x 8 foot panels go up faster and save labor. Use natural or paint grade as desired.

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Please send me FREE Technical Manual on GPX Plastic Faced Plywood.

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furnished with each unit

No other
STAIRWAY
offers so much



5 exclusive features

1. Actuated by counterweights.
2. Operates on roller bearing which makes raising and lowering practically effortless.
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4. Full width safety treads.
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Easy to handle - Easy to install. Shipped in 1 package assembled. Requires no attic space. No adjustments, no springs. Fits all ceilings from 7 feet to 9 feet 9 inches. (Runners graduated, all you do is measure from finished floor to finished ceiling and saw off runners at desired height.) Accepted by F.H.A. Listed in Sweets. Specified by leading architects. Sold by more than 12,000 dealers in U. S. A. and Canada.

Contact Precision Jobber for attractive prices.

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TECHNICAL PUBLICATIONS

WOOD CONSTRUCTION. Architects' Aids for Better Homes and Other Wood Construction. Timber Engineering Co., 1319 18th St. N. W., Washington 6, D. C. 6 pp. 8½" x 11"

Detail drawings show how to use *Trip-L-Grip* framing anchors in 12 basic kinds of secondary joints in standard wood framing for home construction. First utilized in hurricane areas, the timber connectors are reported to provide rigid joints that tie a structure together against forces from any direction. They also are said to eliminate toenailing, and make notching or shimming of joists for ledgers or strap hangers unnecessary.

GLAZING. Twindow the Window with Built-in Insulation. Pittsburgh Plate Glass Co., Glass Advertising Dept., Pittsburgh 22, Pa. 8 pp. 8½" x 11" Dimensions, specifications and installation information for the manufacturer's double-glazed units are contained in this brochure. A list of 47 standard sizes is included as well as a surface temperature chart and relative humidity and condensation protection chart.

HOME OWNERSHIP. Be Your Own Landlord. Mullins Manufacturing Corp., Warren, Ohio. 24 pp. 5½" x 7½"

As part of its program to stimulate interest in home ownership, Mullins (manufacturer of Youngstown Kitchens) has prepared this cartoon-illustrated booklet for distribution by homebuilders to prospective clients. The publication cites advantages of owning a home, gives some basic rules and charts to help determine financial requirements for home purchase, and describes the three major types of home financing—FHA, VA and private bank loans. Some new building materials and construction techniques are also reviewed.

HEATING. American-Standard Radiator Heating Catalogue R-52. American Radiator & Standard Sanitary Corp., Pittsburgh 30, Pa. 100 pp. 9" x 11½"

Presenting complete information on A-S's wet heat equipment to contractors, architects and builders, *Catalogue R-52* is as useful a refer-



ence as it is attractive. The hardbound book is liberally illustrated with excellent renderings, cutaway views and drawings, and contains ratings, technical data and dimensions of all radiator heating products made by the firm. A fastener is included at the back of the book for attaching the current price list.

Here is a
Quicker
and
Less Costly Way
To

Build A FIREPLACE

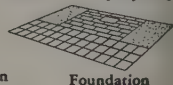


around this scientifically designed steel form which also provides circulating heat that assures perfect fireplace operation.

free folder tells how

TELLS HOW TO BUILD YOUR FIREPLACE—Step by Step

- Foundation
- Steel heat-circulating form
- Cold and warm air ducts
- Chimney and flue construction
- Mantel or decorative front

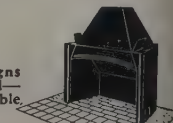


Foundation

ASK FOR BOOK
"100 FIREPLACE IDEAS"

Beautiful fireplace designs modern and conventional—shows artistic use of available material.

Home, Cottage, Playroom and Camp



Fireplace form set on foundation includes firebox, damper, down draft shelf and smoke dome.



Brick, stone or cement block can be used around the form.

- ☐ Send free directions for building heat-circulating fireplace.
- ☐ Send Book "100 Fireplace Ideas." Pocket size book, sent free.
- ☐ Send larger book, 8½ x 11, beautifully illustrated, 25c.
- ☐ Send outdoor fireplace folder with 10 beautiful designs Free.

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Name

Street

City

Sold Through Leading Building Materials Dealers

PRICE FIREPLACE HEATER & TANK CORP.
131 W. Austin Street, Buffalo 7, New York

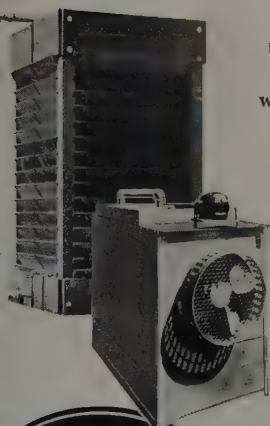
Consider these Cold Facts on the Cost of COMFORT COOLING

Power rate is average of 20 major cities.
All figures based on operation for 1200
hours (average usage for a season)

Size of Cooling Unit	Cost of City Water if used directly	Power Costs for Cooling Tower & Pump	Cost of Water used in Cooling Tower	Savings Effected by use of Cooling Tower
3-Ton	\$ 87.00	\$12.00	\$3.00	\$ 72.00
5-Ton	144.00	20.00	5.00	119.00
7-Ton	204.00	25.00	7.00	172.00
10-Ton	288.00	28.00	9.00	251.00

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TECHNICAL PUBLICATIONS *cont'd.*

BUILDING RESEARCH. A Survey of Housing Research in the U.S. Housing & Home Finance Agency. For sale by Superintendent of Documents, US Government Printing Office, Washington 25, D. C. 723 pp. 8½" x 11". \$3

Now that it is published it is hard to imagine how the homebuilding industry stumbled along without it. *Survey of Housing Research* may look like a fat compendium but is all meat. More than 1,000 research projects—complete and in-the-works—are fastidiously catalogued together with notes on personnel involved and data available. About 700 of the projects deal with technical problems—building materials, structure, mechanical equipment and construction methods. The rest are concerned with social science—urban studies, economics, housing regulations, and marketing. The *Survey* should do much to help the industry help itself by coordinating and making more effective use of current research findings.

BUILDING MATERIALS. Flintkote Building Materials. Flintkote Co., 30 Rockefeller Plaza, New York 20, N. Y. 12 pp. 8½" x 11"

The catalogue contains color close-ups of Flintkote roofing and siding; and detailed specifications on the asphalt shingles, asbestos-cement products, insulation materials, insulating siding, and built-up and roll roofing.

CONDENSATION. How to Control Moisture in Homes. National Mineral Wall Assn., 2906 RKO Building, Rockefeller Center, New York 20, N. Y. 72 pp. 5" x 8". 25¢

Problems of excessive moisture in homes—their causes, effects, prevention, and control—are analyzed in this carefully researched study. Simply phrased, the book is nevertheless an explicit and comprehensive coverage of the technical aspects of condensation; and as such, an invaluable reference for homebuilders.

FLOOR MAINTENANCE. Modern Methods of Floor Care. S. C. Johnson & Son, Inc., Box P, Racine, Wis. 16 pp. 4½" x 8½"

The booklet concisely describes maintenance treatment for 13 different types of floor surfaces. It contains a chart for selecting proper waxes for various floors.

THERMOSTATIC CONTROLS. The Lawler Line of Thermostatic Control Valves, Catalogue No. C-5. Lawler Automatic Controls, Inc., 453 N. MacQuesten Parkway, Mt. Vernon, N. Y. 8 pp. 8½" x 11"

Printed in two colors, the photo-illustrated catalogue gives complete engineering data on Lawler thermostatic controls. The text covers temperature regulators, tempering valves, thermometers, shower mixers, and special equipment for institutional applications.

continued on p. 222



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That means those **wonderfully** **m-o-o-t-h**, so **easy-to-open** **HIDALIFT** fitted windows."



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the completely modern sash balance

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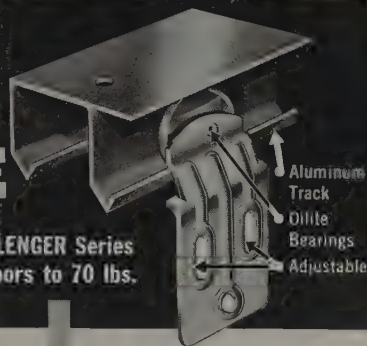
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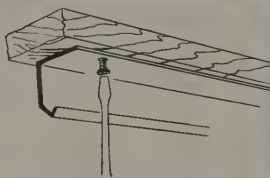
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3 models of the New CHALLENGER Series meet all your needs for doors to 70 lbs.



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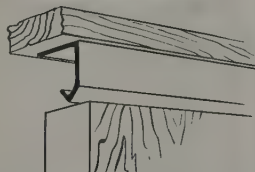
- The top-mounted Challenger track can be speedily installed, requires no mortising.

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- V-groove track eliminates chattering
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- Durable Nylon Rollers

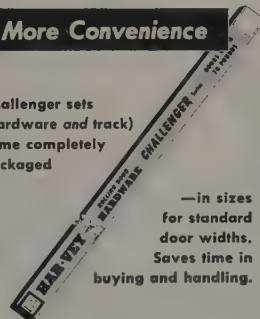
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Typical low delivered price only \$2.70 list
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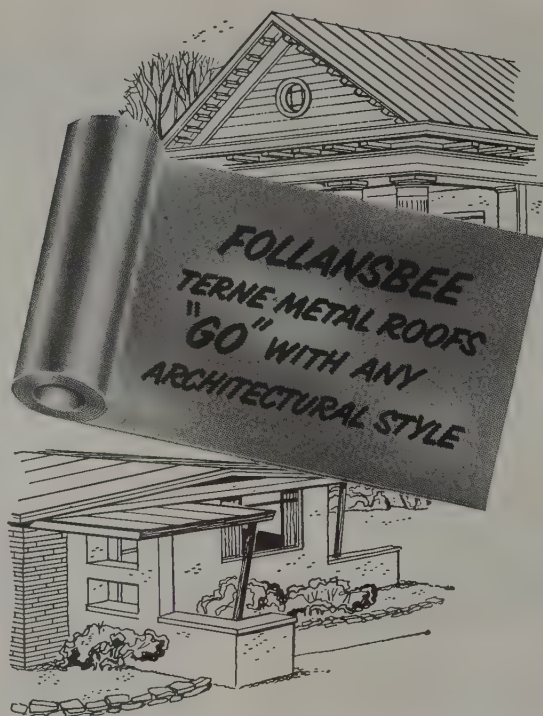
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For bathroom beauty that endures, GULFSPRAY shower doors and tub enclosures of heavy-gauge aluminum or stainless steel; clear or patterned glass. Engineered to keep water OFF the floor and to add luxury and comfort to bathing. Install GULF-SPRAY in your new or present home, you'll enjoy it for the years to come.

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6

TIMES LESS

... than non-weatherstripped windows by actual test of weatherstrip manufactured by members of the Weatherstrip Research Institute. (University of Minnesota Institute of Technology Testing Laboratory.) Effectiveness is greater than 6 for average or poorly fitted windows.

Reduction in Air Infiltration Through Windows Due to Weatherstripping (Unlocked—no storm sash)

Type of Fit	Par Infiltration* cfh/ft. of Crack		
	Weather- stripped	Non- Weather- stripped	Weatherstrip Effectiveness†
Well	14.2	61	4.30
Average	16.7	104	6.24
Poorly	23.8	163	6.85

*At a pressure of 0.20 inch of water (20.4 mph wind velocity).

†Ratio of non-weatherstripped to weatherstripped par-infiltration.

The above facts, plus the complete story on weatherstripping is presented in Bulletin No. 35—"Air Infiltration Through Weatherstripped and Non-Weatherstripped Windows," published by the University of Minnesota, Institute of Technology. The facts showing the economic value of weatherstrip are based on over-all research of climatic conditions in 12 selected cities in the U.S. covering a full range of weather conditions.

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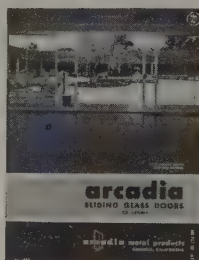
Please send my FREE Copy of the 47 page,
illustrated Bulletin No. 35.

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TECHNICAL PUBLICATIONS *cont'd.*

DOORS. Arcadia Sliding Doors, Catalogue X-8. Arcadia Metal Products, 234 N. Second St., Box 657, Arcadia, Calif. 8 pp. 8 1/2" x 11"

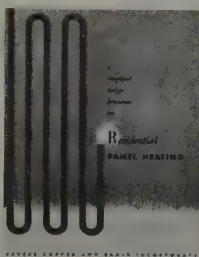
Four full-size tracing details and numerous scale drawings of the manufacturer's steel-



frame sliding glass door units are shown in this brochure. Specifications and an illustrated list of sizes and types are also included.

HEATING. A Simplified Design Procedure for Residential Panel Heating. Revere Copper and Brass, Inc., 230 Park Ave., New York 17, N. Y. 28 pp. 8 1/2" x 11"

Incredible as it may seem, Revere has worked out an accurate method for designing residential hot-water panel heating systems which does *not* require the engineer or contractor to compute heat loss. No sleight of hand was involved; merely conscientious and creative research into hundreds of radiant panel installations engineered via precise graphical means. A statistical analysis of this study revealed that the vast majority of homes could be pegged into one of 16 groups of structural characteristics. (For houses of unique construction or shape, or with extreme exposure or excessive ventilation, the company suggests



using its *A Graphical Design Procedure for Radiant Panel Heating*.) These basic groups, listed on the first page of the booklet, were determined by various combinations of three factors: whether a room is insulated, amount of glazing, and whether the space above or below is to be heated. Once classified, almost any room can be engineered for the right size panel and water temperature to heat it comfortably through some simple-to-use tabular data. Bringing up the rear of this compact handbook is descriptive material on forming and positioning coils, use of bending tools, and making solder joints.

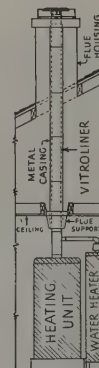
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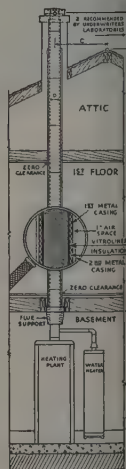
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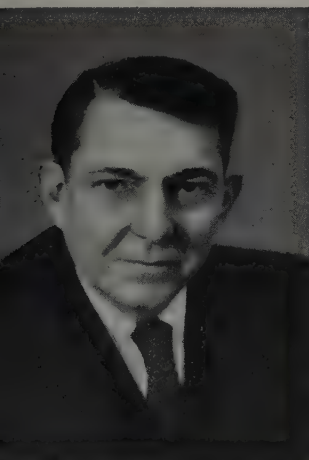


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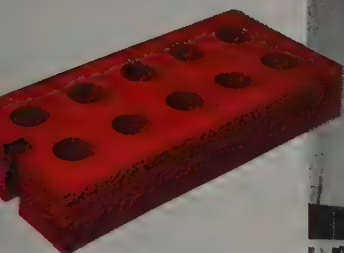
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"SCR brick"—the THRU-THE-WALL unit builds solid brick homes for the cost of one. Developed by the Structural Products Research Foundation.



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Furring with 2" x 2"'s accommodates insulation and wiring, forms cavity as moisture barrier.

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There's one reason why the demand for "SCR brick" is booming from coast-to-coast. Here are some others—reported by home-builder Vane R. Howard of Hammond, Indiana:

"I like the flexibility of 'SCR brick' construction—it gives you plenty of design freedom.

"There's only one unit to handle—the wall goes up faster.

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*Reg. TM, SCPRF, Patents Pending

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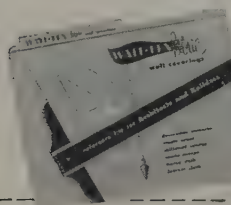


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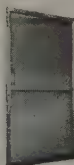


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MARMET extruded aluminum doors available in natural or anodized finish.



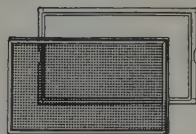
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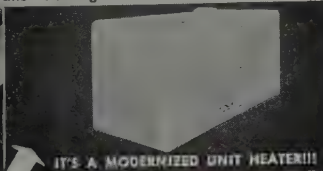
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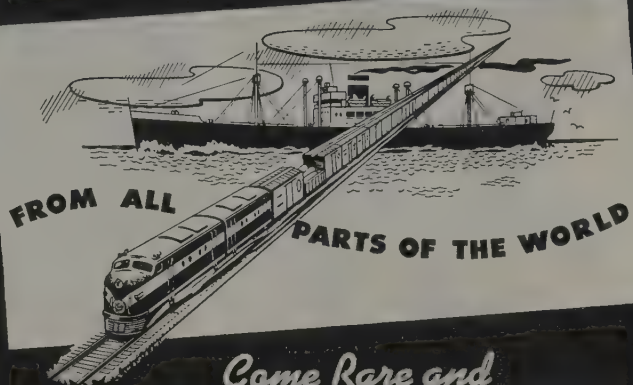
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THOMASON Flush Doors are produced from
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IMPORTANT

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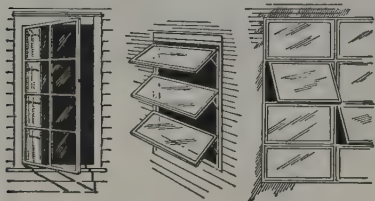
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These spring bronze or aluminum alloy weatherstrips make a perfect seal for ALL types of HINGED METAL windows . . . steel and aluminum casements . . . awning style windows . . . projected windows . . . metal ventilators in picture windows.



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TECHNICAL PUBLICATIONS *cont'd.*



CONDENSATION. Man's Necessity — Enemy of the Home — Water. Steel Window Institute, 806 Rowland Road, Cheltenham, Pa. 12 pp. 8 1/2" x 5 1/2"
Prepared as an educational service for home-builders and buyers, this neatly illustrated booklet simply and graphically defines condensation, explains its causes and how to ward off detrimental effects.

HARDWARE. Beauty and Security for Your Home. Sargent & Co., Dept. 85, New Haven 9, Conn. 8 pp. 8 1/2" x 11"

Mechanical and installation features of the *Integralock* residential entrance lock are described in this booklet, which also illustrates the manufacturer's 4500 line of interior locks and latches, and points out appropriate sets for various rooms.

TOILET SEATS. Olsonite Solid Seats. Swedish Crucible Steel Co., Plastic Division, 8561 Butler Ave., Detroit 11, Mich. 64 pp. 8 1/2" x 11"

Spiral-bound and divided into six sections for quick thumb-through, this detailed catalogue is a handy reference for purchasers and specifiers of bathroom equipment.



DOORS. Latest Color Style News. Ponderosa Pine Woodwork, 38 S. Dearborn St., Chicago 3, Ill. 24 pp. 8 1/2" x 11"

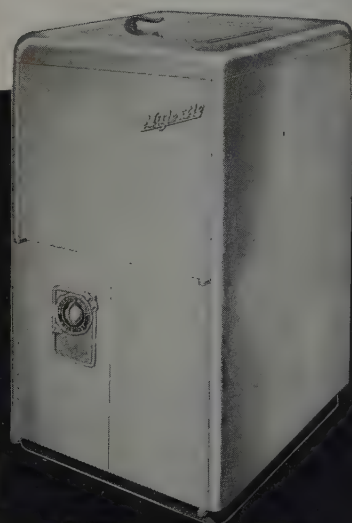
Colorful illustrations suggest how the *Rancho*, a new 3-paneled pine door and other paneled units, may be stained, painted or treated with appliques for unusual decorative effects.

MACHINERY. Three New Plaster-Mortar Mixers. Koehring Co., Milwaukee 16, Wis. 4 pp. 8 1/2" x 11"

This brochure features a data table comparing dimensions, capacities and advantages of three plaster-mortar mixers. Photos illustrate the two 6 cu. ft. models and one 3 cu. ft. unit.

continued on p. 228

Equip your houses with The **NEW** **Majestic** INDOOR INCINERATOR



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It takes more than a sign out front to sell a house today! It takes those extras — those added conveniences that home-buyers now demand! And there's no better silent salesman than Majestic's new Indoor Incinerator — a beautiful, economical housewife-helper . . . a home disposal wonder that proves to prospects your houses are designed for modern living!

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By builders of incinerators since the '20's — plus AGA approval.

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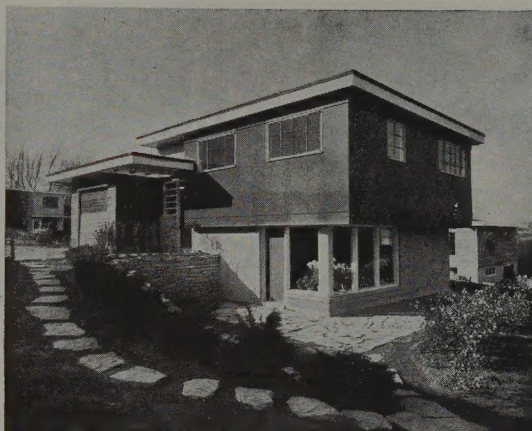
The Majestic Co., Inc.

413-A Erie Street

Huntington, Indiana

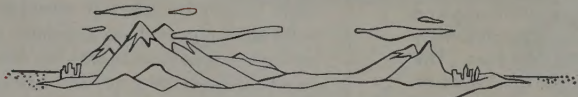


Mr. William A. Zeh, builder of this house at Los Angeles, Cal., says, "No builder nowadays would think of installing anything but automatic heat and electric refrigerators in his new houses. And just as people take those things for granted, they're looking for automatic electric cooking equipment."



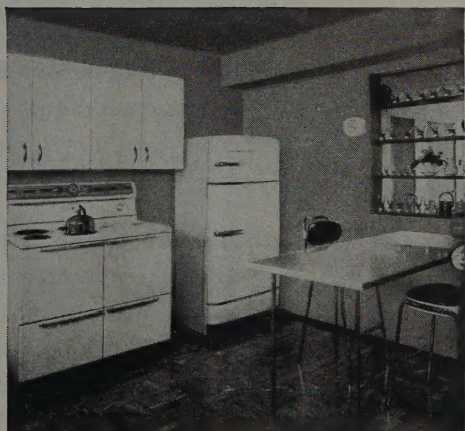
"'Modern' is the theme of our development," says Mr. Noble S. Clay, builder of this house at Shaler Township in Pennsylvania—"and we find that most home buyers go for contemporary design. The *Electric Range* is a definite part of it. It's *really* modern cooking equipment. *Everybody* wants the electric convenience features."

EAST OR WEST—



these houses have one thing in common

they have electric ranges!



This is a kitchen of a Shaler Township house. Builder Clay practiced electrical engineering for 16 years before entering the building field. His background helped him to choose what home buyers want, so the range—of course, it's **ELECTRIC!**

Home buyers may differ on the size of house they want, or on its construction features. But from one end of the country to the other they want *Electric Ranges* in the kitchen. They've learned that cooking with an *Electric Range* is both economical and easy, and assures a clean, cool kitchen. No matter what the size or price bracket of *your* houses, one item of equipment that will really help you sell them is the *Electric Range!*

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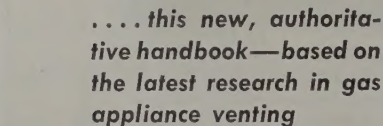
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WILLIAM WALLACE COMPANY
BELMONT, CALIFORNIA

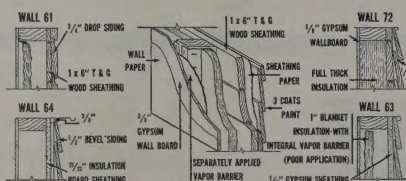
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the VENT INSTALLATION HANDBOOK.

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ADDRESS		
CITY	ZONE	STATE

A black and white photograph of a long, white, gabled building, likely a schoolhouse or church. The building has a dark door and a small window. The roof is dark, and the walls are white. The building is set against a dark background.

FRAME CONSTRUCTION. Moisture and Durability of Wood Frame Walls, Housing Research Paper 16, by R. C. Reichel, Structural Research Engineer, Division of Housing Research, HHFA. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C. 20 pp. 8" x 10 1/4". 15¢

Beneath the formal phraseology in this research paper, homebuilders and designers can find some revealing data on the weatherability of wood-frame construction. Dealing with a continuing experiment on the durability of different types of wood-frame walls, the publication outlines a unique study setup and summarizes results so far. A one-story enclosure 26' x 16' x 8' was erected on the roof of the thermal lab at Pennsylvania State College and exposed, on the outside, to actual climatic conditions and, on the inside, to temperature and humidity levels representative of the region. The test shell consists of 22 removable wall assemblies utilizing typical construction materials. Although



Paper 16 covers only the first six months of the research, the current information should help to improve construction techniques and reduce maintenance on existing dwellings.

The weather during the first half-year of the test was unusually mild, and so the data could be interpreted as being more applicable to southern areas than to central Pennsylvania. However, the results indicate that generally moisture inside a building causes paint blisters on the outside and mold within the walls *unless* prevented by a *well-applied* vapor barrier, or adequate ventilation. Furthermore, contrary to previous laboratory tests under "simulated" weather conditions—which indicated that no blistering occurred where the siding had less than 25% moisture content, the Pennsylvania study shows that blisters formed where there was 20% moisture in the siding and, in two instances, just 16%.

TOOLS. Portable Cutting Tools, Catalogue No. 252. Manco Mfg. Co., Bradley, Ill. 4 pp. 8 1/2" x 11" Lightweight hand cutters and high-strength bolt cutters for steel rod, wire, and strapping.

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Cabot's unique finishes for Redwood are famous the country over . . . bring out and preserve the full beauty of exterior Redwood. Available in 5 Attractive Finishes.

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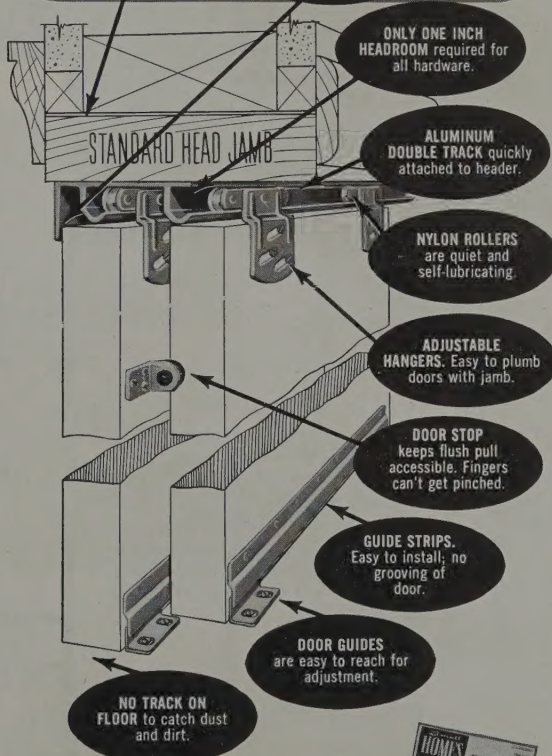
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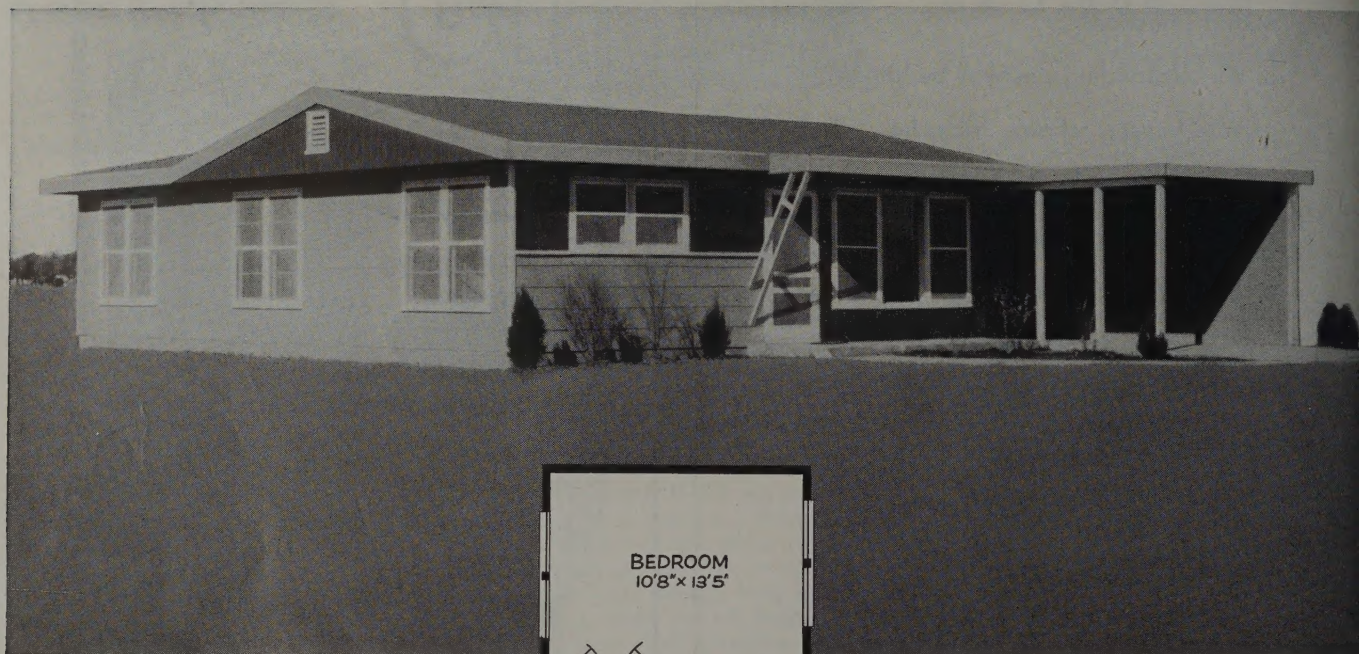
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Working from three basic floor plans which adapted to twenty-one different elevations, Mr. Hughes offered a wide range of choice in 1952. Further styling variety was added by one hundred different color and siding combinations. Model 502 (illustrated above) is a three-bedroom, nine hundred and twenty-seven square-foot house designed primarily for defense workers. With carport on a 60' x 135' plot, it sold for \$8750.

